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HYGEIA

THE HEALTH MAGAZINE

PUBLISHED BY THE AMERICAN MEDICAL ASSOCIATION

JANUARY, 1931 25 CENTS

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Direct

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THE HEALTH MAGAZINE

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Edited by Morris Fishbein, M.D.

JANUARY, 1931

TABLE OF CONTENTS

VOLUME 9 NUMBER 1

COVER DESIGN
Keith Don Musselman PAGE

WHITE HOUSE CONFERENCE ON CHILD HEALTH AND PROTECTION 18
HUMIDITY IN THE HOME 20
E. P. Lyon
AT WHAT AGE SHOULD SEX EDUCATION BEGIN? 24
Guy McNeill Wells
THE REDEMPTION OF APPALACHIA 26
Frances Sage Bradley
FASHION AND MOTHERHOOD 31
Edward Lyman Cornell
SOME EARLY MEDICAL MAGAZINES 32
Calvin T. Ryan
PROBLEM FOR THE PSYCHIATRIST 34
Sara Henderson Hay
METALS THAT WE EAT 35
Lawrence H. Baker
THE HIGH COST OF PERSONAL NEGLECT 40
J. Bayard Clark
STRYCHNINE POISONING BRINGS DEATH TO MANY INFANTS 43
BUILDING MENTAL HEALTH 44
Irving J. Sands
THE SAFEST PLACE IN TOWN 46
W. W. Bauer
SUBSTITUTES FOR SWEETS AT CHILDREN'S PARTIES 51
Ruth Peck McLeod
AT A CITY HOSPITAL 52
Margaret Munsterberg
CHILD WELFARE MEDALLIONS 53
A. Levinson
GERMANY TAKES UP FIGHT AGAINST QUACKS 56
CONSERVING THE SCHOOL CHILD'S TEETH 57
Ruth L. Frankel
MAGIC OF WRITTEN WORDS 60
Rose Henderson
HEALTH PURSUITS IN PICTURES 64
ALICE IN SLUMBERLAND 67
Nellie G. Herriman
THE KITTENS' TEA PARTY 70
Mildred Whitcomb
HEALTH AND THE SCHOOL 71
Edited by J. Mace Andress
NEW BOOKS ON HEALTH 74
QUESTIONS AND ANSWERS 76

Contributors to This Issue

Of the deserts within our own homes DR. E. P. LYON writes. Dr. Lyon is dean of the University of Minnesota Medical School, and we are a little apprehensive lest his mother-in-law read the January HYGEIA. A master in biology at Kingsley School, Essex Fells, N. J., GUY MCNEILL WELLS has both theoretical and practical knowledge about youth and sex education.

DR. FRANCES SAGE BRADLEY has been a member of the state health departments in Montana and Arkansas, has done health work in the Kentucky mountains, and for many years was special agent for the federal Children's Bureau. The new series on preparing for the baby is by DR. EDWARD LYMAN CORNELL, obstetrician.

CALVIN T. RYAN is on the staff of the Nebraska State Teachers College and manages to do considerable writing as well as teaching. The article on the metals in our diet is by LAWRENCE H. BAKER, assistant to the dean of the University of Maryland School of Medicine.

A plea for the return of the family doctor and the need for periodic health examinations is made by DR. J. BAYARD CLARK, specialist in urology. DR. IRVING J. SANDS' remarks on building mental health are based on the radio talk he made over Station WNYC under the auspices of the Greater New York Committee on Health Examination. Dr. Sands is the author of a recent book for nurses on nervous and mental diseases. DR. W. W. BAUER, a Wisconsin health officer, is a familiar contributor to HYGEIA on topics of public health. DR. A. LEVINSON is a pediatrician, a medical historian and a collector of, among other things, medical medallions.

Both RUTH PECK MCLEOD and RUTH L. FRANKEL manage to combine household duties and writing; their names are not new to readers of HYGEIA. The part that good books play in convalescence is well told by ROSE HENDERSON.

The new children's series by NELLIE G. HERRIMAN is of the type she has found helpful in her school health work in Montpelier, Ohio. Her object is to develop an ideal of cleanliness and a higher code of conduct among children of the intermediate grades.

The verse this month is by SARA HENDERSON HAY of Anniston, Ala., whose work appears in several anthologies, and by MARGARET MUNSTERBERG of Brookline, Mass.

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White House Conference on Child

ON NOVEMBER 19, the opening session of the White House Conference on Child Health and Protection heard the message of President Hoover concerning the motives for the organization and promotion of this monumental attempt to collate knowledge on the care of the child. "The fundamental purpose of this conference," said the President, "is to set forth an understanding of those safeguards which will assure to the child health in mind and body." It is not the purpose of the conference, he pointed out, to replace in any sense of the word those services that are the responsibility and duty of the individual parent. Nothing can replace the physical, moral and spiritual gifts of the home. There are, however, services that the community, the state and the nation must undertake and it is particularly with these problems in mind that the conference was called. The three chief functions were the protection and stimulation of the normal child, aid to the physically defective and the handicapped child, and the problems of the delinquent child.

The last decade has seen more attention to problems of child welfare than any previous decade or score of years has provided. A vast amount of information has come from the schools, the clinics and the laboratories. It is necessary to interpret this information, to disseminate it and to put it into practical effect. A conference, such as that held in Washington, makes available such information, coordinates it, analyzes it and sifts fantasy and notions from truth and established fact. Until such knowledge becomes the property of the vast majority of the people, however, it is not serving any real function in the community.

SPACE does not permit publication in HYGEIA of the complete report of the conference. It delved into every phase of the relationships of the child to the community. It concerned itself with all of the knowledge now available for giving to every child the maximum opportunity consistent with his constitution and environment.

Unfortunately newspaper reports of the White House Conference seem to have been devoted largely to an argument concerned with the precise place of the Children's Bureau in the scheme of governmental organization. It might be taken for granted that any function primarily concerned with health would be established as a part of the government health service rather than as an independent department functioning in connection with the Department of Labor. The educational features of our federal service are associated with the Department of the Interior.

The full stenographic report of the conference indicates that the battle on the question of reorganization of the governmental services actually occupied relatively little of the attention of the conference. Conflict means journalistic featuring; as a result the constructive aspects of the numerous reports received little attention compared with the amount of space devoted to the situation that seems to have been agitated for personal reasons primarily rather than for the good of the child.

DURING the year that preceded the holding of the Conference on Child Health and Protection, some 1,200 workers, divided into committees and subcommittees, gave thought to the numerous aspects of this question. At the conference itself some 3,000 persons interested in these problems listened to the reports and gave them such discussion as time and the occasion permitted. At the end of the conference resolutions were presented and referred to appropriate committees. A continuation committee is to be established to carry into effect the aims and purposes of the conference.

The chairman, Dr. Ray Lyman Wilbur, presented at the final meeting the report of the Procedure Committee, including twenty fundamental principles for child health and protection:

1. Every child is entitled to be understood and all dealing with him should be based upon the fullest understanding of the child.

2. Every prospective mother should have suitable information, medical supervision during the prenatal period, competent care at confinement. Every mother should have postnatal medical supervision for herself and child.

3. Every child should receive periodical health examinations before and during the school

Health and Protection: An Editorial

period, including adolescence, by the family physician, or the school or other public physician, and such examination by specialists and such hospital care as its special needs may require.

4. Every child should have regular dental examination and care.

5. Every child should have instruction in the schools in health and in safety from accidents, and every teacher should be trained in health programs.

6. Every child should be protected from communicable diseases to which he might be exposed at home, in school or at play, and protected from impure milk and food.

7. Every child should have proper sleeping rooms, diet, hours of sleep and play, and parents should receive expert information as to the needs of children of various ages as to these questions.

8. Every child should attend a school which has proper seating, lighting, ventilation and sanitation. For younger children, kindergartens and nursery schools should be provided to supplement home care.

9. The school should be so organized as to discover and develop the special abilities of each child, and should assist in vocational guidance, for children, like men, succeed by the employment of their strongest qualities and their special interests.

10. Every child should have some form of religious, moral and character training.

11. Every child has a right to a place to play with adequate facilities therefor.

12. With the expanding domain of the community's responsibilities for children, there should be proper provision for and supervision of recreation and entertainment.

13. Every child should be protected against labor that stunts growth either physical or mental, that limits education, that deprives children of the right of comradeship, of joy and play.

14. Every child who is blind, deaf, crippled, or otherwise handicapped should be given expert study and corrective treatment where there is the possibility of relief, and appropriate development or training. Children with subnormal or abnormal mental conditions should receive adequate study, protection, training and proper care.

15. Every waif and orphan in need must be supported.

16. Every child is entitled to the feeling that he has a home. The extension of the services in the community should supplement and not supplant parents.

17. Children who habitually fail to meet normal standards of human behavior should be provided special care under the guidance of the school, the community health or welfare center or other agency for continued supervision or, if necessary, control.

18. When the child does not have these services, due to inadequate income of the family, then such services must be provided to him by the community. Obviously, the primary necessity in protection and development of children where poverty is an element in the problem is an adequate standard of living and security for the family within such groups.

19. The rural child should have as satisfactory schooling, health protection and welfare facilities as the city child.

20. In order that these minimum protections of the health and welfare of children may be everywhere available, there should be a district, county or community organization for health education and welfare, with full-time officials, coordinating with a state-wide program which will be responsive to a nation-wide service of general information, statistics and scientific research. This should include:

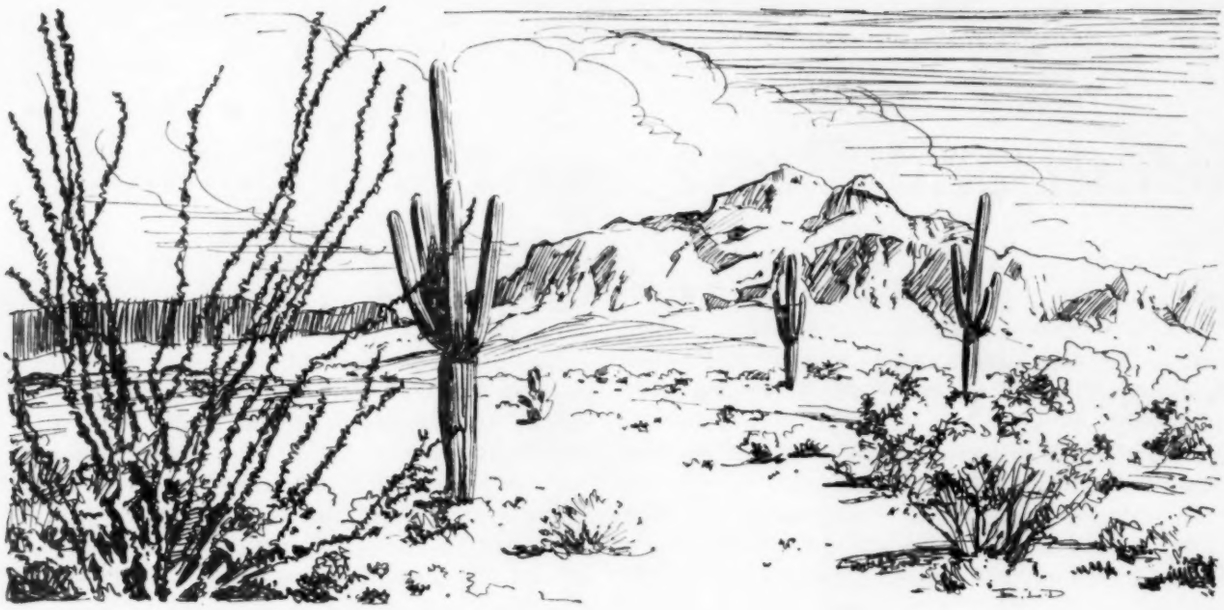
(a) Trained, full-time public health officials with public health nurses, sanitary inspection and laboratory workers.

(b) Available hospital beds.

(c) Full-time public welfare services for the relief and aid of children in special need from poverty or misfortune, for the protection of children from abuse, neglect, exploitation or moral hazard.

(d) The development of voluntary organizations for children for purposes of instruction, health and recreation through private effort and benefaction. When possible, existing agencies should be coordinated.

FINALLY, Dr. Wilbur pointed out the importance of holding state conferences, if possible, on the call of the governor of each state so that local groups might do everything possible to further the objectives of this great movement.



Arizona desert air, famed for dryness, is surpassed by the air of the average city home.

Humidity in the Home

By E. P. Lyon

THIS piece is a credo and not a nosco. This paper in other words tells what "I believe" and not altogether what "I know." No one has proved in a way acceptable to physiologists that the lack of moisture in the air of our homes in northern latitudes in winter is bad for the health. The general belief in this direction rests on common observation and clinical evidence. Neither method approaches the exactness of controlled experiment.

The fact is there is as much moisture per cubic foot inside our houses in winter as outdoors on the same day, and usually there is more. The difference between indoors and outdoors is in temperature. The high temperature inside means a greater capacity for moisture, a greater drying power. The hot, dry air of our homes and offices parches the skin and tends to dry the mucous membrane of the respiratory passages. Doubtless there are more respiratory troubles in winter; perhaps the parched skin gives rise to obscure nervous disorders—many doctors think so. Nevertheless it is to be borne in mind that many other conditions are different in winter. Sunlight is different—diminished in amount, changed in quality, decreased in time. Life is different. People live indoors, close together. Recreations are different. Definite demonstration of the cause of nervous upsets or of increased nasal infections in winter would need to be made with thorough control of these other factors. A comparison would also need to be made between those who live principally indoors and those who live largely outdoors. Both breathe air containing about the same amount of water per cubic foot; the difference again is temperature. Which lot would be the healthier? Most people would bet on the outsiders. But recall that their life differs in many other ways; for one thing, they get a lot of exercise.

That the breathing of dry air causes changes in body conditions as contrasted with breathing moist air is a fact. Some years ago Dr. Greisheimer and I experimented in this limited field. Our apparatus permitted us to give the subject, without his knowledge and at constant temperature, air of any desired degree of moisture. Measurable and fairly constant differences of pulse rate, blood pressure, respiration rate and skin temperature were found. But the experiments told nothing as to which condition, moist air or dry air, was more healthful.

Of course I believe I feel better when the air of my home is humidified and the temperature

kept down. But dear mother-in-law doesn't believe she feels better. She believes she feels worse. She is certain—that is, she believes—that our Minneapolis home even without humidification is much damper in winter than in summer. She observes that when the outside kitchen door is opened on a cold day a cloud of vapor appears and this never happens in summer. Therefore, she believes she knows the house is damper in winter. It does no good to explain the physics of the two situations or even to point out the drying of bread or the powdery condition of the herb in my tobacco jar.

She thinks she feels—in other words there is a big psychologic factor in this whole business. I know several persons who think they feel better because they have, on a single radiator, a water receptacle from which evaporates perhaps a pint a day. Yet the increased humidity caused by such evaporation could not be detected by ordinary instruments. They even talk of feeling better because they have the humidifier when a secret examination reveals no water at all in the pan. In such cases I smile and recall the wise words of the town fool down in Maine. "When I have anything to say," said old George, "I keep my mouth shut."

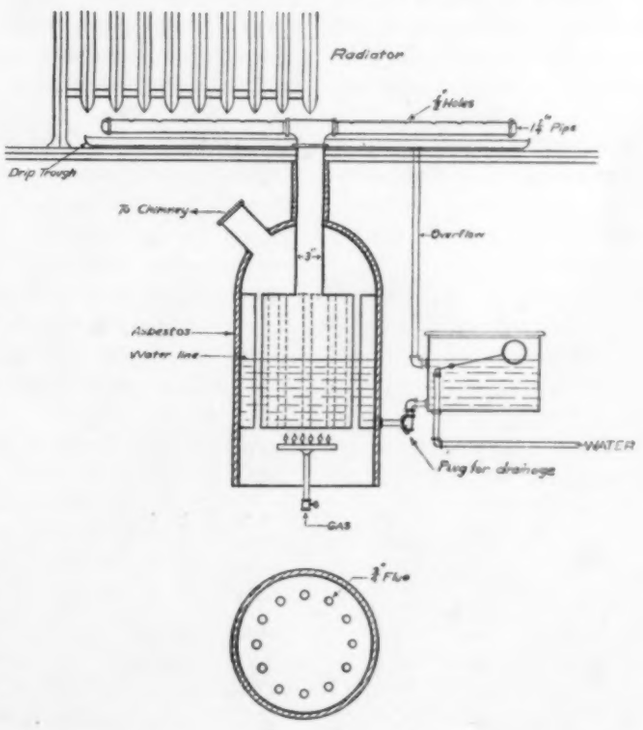
That our inside air in winter contains as much moisture per unit volume as outside air is fact. That relatively it is enormously drier is fact. That it is often drier than the Sahara or Arizona is fact.

The outside air gets inside, the inside air gets out. Around windows and doors—even through the walls—the seepage goes on constantly. Wind increases the exchange. When it blows, cold air in increased amounts comes in on the windward side and warm air in equal volumes goes out on the opposite side. Moisture that is put into the house air will not stay in the house. It becomes part of the air and goes out with it. The practical side of humidifying must take this fact into consideration. Moisture must be added constantly and the amount must be large.

Houses vary in leakage rate. My own house has two fireplaces. If these are open, at least a gallon of water must be evaporated each and every hour to keep the humidity up to 35 per cent on a cold day—two thirds of a barrel a day! If the fireplaces are closed the quantity of evaporation need not be quite so large. Some houses require less than mine, some doubtless considerably less—but in any case the quantity runs to several gallons a day for a moderate sized house. There is no way that I know of telling how much evaporation you need in your house to produce a desired degree of saturation except by trying it. The practical moral of these remarks is not to believe salesmen's patter. If you buy humidifying apparatus, get a written guarantee that it will do what you want done. Do not pay the bill until some one checks up not merely the quantity of water evaporated but the degree of humidity produced—and choose a cold day for the test.

The last ten years have brought to the market various mechanical humidifying systems. With blowers and sufficient heat there is no great trick in getting any amount of water vapor into a building. Some systems are, I believe, automatic. If a mechanical system is backed and installed by reliable engineers, there ought to be no doubt as to its efficiency. However, such systems are expensive and beyond the reach of the ordinary householder. I am one of the latter and my thought and experiments have been in the direction of finding something cheap but efficient. It isn't easy.

I have tried all possible schemes of securing evaporation by use of the heat from hot water radiators. The best apparatus I can devise for this purpose may evaporate a gallon of water per day per foot of radiator occupied. This means, if any efficiency is to be secured, that you must have the appliance on every radiator. No easy way of automatic supply has been devised. The pans must be filled by hand. I have quit experimenting in this field on account of this fact and the unsightly character of any mechanism that is large enough to be efficient. I have found no radiator humidifiers on the market that are at all efficient. I think the problem of humidification in homes heated by hot water can best be solved by accessory apparatus involving either fans or extra heat or both.



In a previous article I spoke in favor, in principle, of the water spray system

Sahara itself is not drier than the indoor deserts that are our modern homes.

for moistening, washing and creating air currents in homes. There are two objections, however. The spray may be noisy. People don't like that. Also the runoff waste water is warmed in passing through the apparatus and that quantity of heat is lost. People are likely not to think of this. I have made no experiments to ascertain how important this factor is from a cost standpoint.

Get a Guarantee on Spray Apparatus

The fault I find in the spray apparatus on the market is that the manufacturers, in order to get it out of sight between studdings, have reduced the size to such an extent that the efficiency is seriously lowered. My advice to those contemplating the purchase of such appliances is to get a guarantee that it will do the job in the particular situation. In my house the ordinary commercial spray apparatus proved entirely inadequate. In a less "leaky" house it might be found satisfactory.

The hot air furnace if provided with water pans of sufficient size above the fire may be an efficient humidifier. An automatic source of water supply is essential, else nine tenths of the time the owner will have only psychologic humidification.

Recently I saw a letter from a lady who had a finely built, insulated, moist air heated, double windowed new house. She complained that condensation took place on the outer windows. She couldn't understand it.

Of course the practical limiting factor to house humidifying is condensation. On this account I do not believe there are many houses in which one can maintain 50 per cent saturation in cold weather. Outside walls may become wet, closets full of frost.

A friend of mine rigged his hot air furnace with a spray playing into the hottest part of the heating chamber. Plentiful evaporation was secured. The air of his home in Minneapolis in January was like in May. Then one day he went to the attic. There he found a snow drift a foot deep. He looked for holes in the roof through which snow might enter. There were none. He came to the conclusion that he had home-made snow. The moist air, kept in vapor form in the living rooms, upon penetrating to the attic was cooled and precipitated as snow. He had to cut his evaporation to a more practical, if less comfortable, quantity.

An Interesting but Untested Device

Other interesting schemes have come to my attention. An acquaintance asked me to see a device he had put in his home, using to produce evaporation the heat ordinarily lost in the flue gases from his oil furnace. A chamber of galvanized iron was built around the pipe going to the chimney. To and from this chamber were air shafts connected to registers in the floor above.

A fan which was turned on and off by the same thermostat that controlled the oil burner brought air from the rooms above through the chamber and returned it to the living rooms. A fine spray over the hot flue inside the chamber, with runoff to the sewer for excess, completed the installation. It appeared correct in principle, using heat that otherwise would be lost. Of course the humidification would be intermittent. On the other hand it would be increased in cold

weather on account of the greater time of operation of the oil burner in such weather. Such increase is necessary because the colder the outside air the less initial moisture it contains. No actual tests had been made of this apparatus so it is a guess what it will accomplish.

The Author's Own Humidifier

Two or three winters ago I played with the device represented in the accompanying diagram, using gas as fuel. The boiler is located in the basement, on brackets, immediately below the steam outlet, which is under a radiator. This boiler is cylindrical, 14 inches in diameter, 12 inches high, made of copper by a local tinsmith. Beneath is a chamber, with slide door, containing a large gas burner (out of a discarded hot water heater). There are twelve flues of ¾ inch copper pipe through the boiler. The flue gases are piped to the chimney. Boiler and connections are well insulated with asbestos. The water line is kept uniform by a tank and ball valve at one side of the boiler. The exit pipe for steam is large (1¼ inches) so that pressure hardly rises above atmospheric and the steam issues noiselessly through several half inch openings in the horizontal section above the floor. (The draftsman has represented the vertical pipe as 3 inches in diameter. I do not think it need be over 1¼ or 1½ inches.)

A pan under this horizontal pipe catches the small drip and returns it to the tank. This pan and the exit pipe are under a radiator in the hall. They look all right and thus satisfy her majesty, the housewife.

This apparatus evaporates more than a gallon an hour, or any smaller quantity, depending on the gas flame used. As stated, operation is noiseless. The low pressure steam mixes with the air rising through the radiator and is rapidly carried all over the house. No vapor is visible except momentarily when a nearby outside door is opened permitting a large flow of very cold air under and over the radiator. This could be remedied by a different location. Except in the flue gases there is no loss of heat, the heat of the steam being added to the air of the rooms. The top of the radiator is not disagreeably hot. There is no danger of being burned unless you get a hand exactly into a steam jet beneath the radiator. The radiator does not rust as a result of steam contact.

I estimated the gas cost at 20 cents per day. But the heat generated is for the most part conserved. Indeed this apparatus operates as an accessory heating plant. The boiler and piping cost about $25. I did the installing and pipefitting. Roughly I estimate that this very efficient humidifier could be made and installed for $50.

I would keep this machine in operation all the time during cold weather if it weren't for mother-in-law. But when I run it she shuts herself in her room. Her beliefs and my beliefs don't jibe. It is better to depend on the undoubted ability of the human system to adjust itself to unusual conditions—including parching dryness—rather than offend the sturdy New England "common sense" that says winter is moister than summer.

Drier than a Kansas Congressman

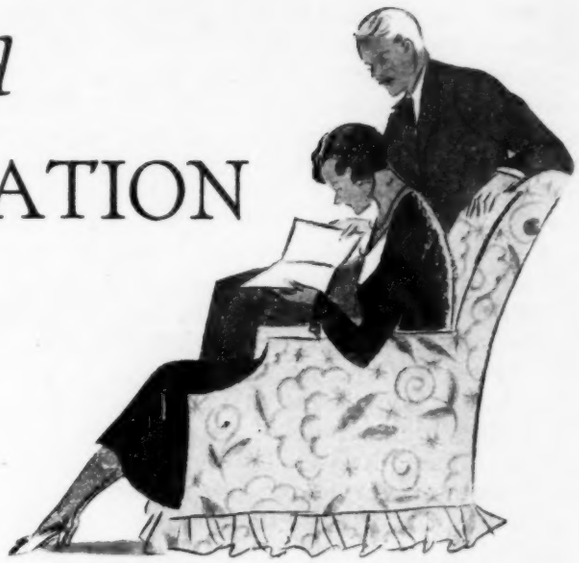
And so my house is dry—drier than a Kansas congressman up for reelection. The thermostat keeps the temperature at 70 F.; but if I don't watch, the ladies slip it up to 72 F. or even 75 F. I believe I should feel better if we had more moisture and a temperature of 65 F. But the Lord gave me a good constitution and a philosophical temperament. So I am content.

My ventilation trinity is motion, moisture, temperature. And the greatest of these is temperature. *Keep it down.* Moisture you can get if you are willing to work for it and pay for it. Motion to some extent is provided by the hot air furnace but is almost lacking in hot water and steam heating. We put away our electric fans in winter—and broil.

At What Age Should SEX EDUCATION *Begin?*

Two and two should be four from the cradle up.

By GUY McNEILL WELLS



Parents must start early or they will never catch up with their child.

MOST of the discussion in regard to sex education seems to revolve around the question, "When or at what age should sex education begin?" This seems to me entirely beside the point, because sex education begins just as soon as the child becomes interested, however remotely, in sex or the things that relate to it.

Sex education is going on all the time, and the question that most parents mean to ask themselves is, "When should I take a hand in it?" If I were permitted to answer I would say that unless the parent starts some years before the birth of the child to learn something about sex himself and to gain an intelligent and sympathetic attitude toward it, he will never have an opportunity to take a hand in the education of his child. The child will soon be so far ahead that the parent will never be able to catch up. Sex education for the child will start relatively soon after birth, and an intelligent attitude toward sex is not a thing that the parent can put on like a coat when need for it arises.

Not a Single Evasion

The parent might as well ask, "When should I stop telling my child that two and two make five and start to teach him that two and two are four?" If he waits until the child is 7 years old before he starts to gain the confidence of the child in such matters he may find that he is already suffering under a handicap of time that he may never be able to overcome. Two and two should be four from the cradle up. The child should never be able to remember a time when evasion and subterfuge marked the attitude of his parents.

The fear that a child can be told too much is equally beside the point, in my opinion. He may be told wrongly or without conviction by a parent whose own ideas are fuzzy or whose attitude is new and uncertain, but he cannot be told too much properly. Anything that does not fit into the association pattern already in the child's mind will not register. Nothing will stick in the child's mind or mean anything to the child unless the memory hook which excited the curiosity is there to receive it. The child can absorb only as much as he can associate with what is already in his mind; that is, with his own experience or observation. The rest will mean nothing to him. He will not consider it important in any sense. So do not bore the child with a lecture in which he is obviously not interested, but at the same time answer fully and freely in as simple and straightforward terms as possible, even though you think you may be giving him more than he can absorb. Better too much than too little. He may be absorbing more than you suspect; in fact, he probably is.

Do not think that an evasive answer will suffice, no matter how young the child. Time, tide and curiosity wait for no man. If the truth is not hung on the memory hook when it is ready, something else will catch on it. Then let the dilettante parent with a meager (if any) technical knowledge of mental processes try to dislodge the waste matter and put something else in its place.

Forget about the Child's Age

Too much is said about the age at which sex education should or should not begin, as though physical age were a criterion of mental development or moral sense. Many children at 12 are more highly developed mentally and morally than many adults of 30, and yet we carefully

handicap them and delay their development because they are only children by keeping from them information that they are ready for and need.

Forget about the child's age. To the question, "When should such and such a question be answered?" there is only one answer: "The first time it is asked." A child that is intelligent enough to ask a question is intelligent enough to receive the answer. Not an answer but the answer. If you do not know the answer, say that you do not know. That, at least, will maintain the child's confidence in your integrity, and that is important.

Curiosity Is Natural and Healthy

Treat a child like a man and he will be a man even when he is a child; bring him up like a child and he will be a child as long as he lives. A child may require to be restrained or disciplined, just as an adult may need to be restrained or disciplined, but if that is the case he should be restrained or disciplined on exactly the same standard and for exactly the same reasons that an adult might be. Similarly, if a child's natural curiosity is respected in the same way that the natural curiosity of an adult is respected, the child will react like an adult. The child or the child's intelligence should not be insulted merely because he is a child. Later, when the child finds, as he is sure to find, that his sincere curiosity has been minimized and questions vital to him have been deliberately flouted, his disappointment in his parents will be profound and bitter.

Curiosity is natural and healthy, and to have one's curiosity satisfied with sincere information is to expand in mind and personality. To have one's natural curiosity flouted and disappointed is to create an attitude of mind that is uncertain, unwholesome and retarding. It conduces to worry and prurience, and the cure for prurience is more information, not less.

Children are not born with unwholesome attitudes. For the cause of any such symptoms the parent had best look first in the mirror. Don't blame it on the neighborhood or the child's playmates. The child prefers to get his standards at home and will go elsewhere only when the home fails to provide them adequately. The first problem in sex education is to educate the parents.

It seems to me a fallacy to assume that there is no need of bothering about sex education until after puberty on the argument that the child has no need or interest in it until then. In the first place the child is by no means sexless before puberty, and an even stronger reason for being prepared for the discussion of this subject before puberty is that before puberty the child's attitude toward sex is predominantly intellectual; that is, it is not at this time highly colored by personal emotional experience. For this reason, an intelligent, unemotional and to a large extent impersonal attitude toward sex can be built up much better before puberty than after. And if this is done the child is able to approach puberty armed and protected rather than helpless, defenseless and confused.

Parents Need Sympathetic Attitude

Sex education is like all education. In order to teach a child one must first know more than the child, and, in addition, one should have a sympathetic attitude toward the whole situation.

No attempt has been made to develop the complete argument on every point, on account of the limitations of space, but enough has been said to indicate that, in my opinion, sex education is no exception to the general theorem that: All knowledge should be available to all persons at all times.

Give the child not an answer but the answer to her questions.

Ewing Galloway

Squire Coggins of Coggins' Cove.

AT LAST the mountaineer is being converted to the gospel of public health. An early acceptance of pestilential visitation from on high, a loyalty to age-old tradition and domestic medicament, and a deep-seated, cherished individualism, which have heretofore blocked his progress, are retreating before the advance of a friendly enemy. The unbelievable is happening through the revolt of youth, a movement as definitely felt down in secluded coves and off on forbidding spurs as it is in more sophisticated centers. It is felt wherever there are good schools, wherever girls and boys are allowed to think for themselves. Three successive incidents in a representative institution show what is happening to 5,000,000 Appalachians.

The Redemption of Appalachia

BACK before the World War Squire Coggins (squire by virtue of an outstanding life of integrity on his peak of the Blue Ridge) protested:

"Well, Maw, I reckon I'm bleeged to go. You're not fitten, with a fo' day young-un, to jolt in the saddle acrost old Nantahala. And hit'd be running in the face of Providence to take the little feller into that mess of measles." The squire reached for a bag hanging from the rafters. "Here's yo' yarbs, and I'll find a poke to put 'em in, but you'll have to tell me how to fix the 'tarnal things. This comes of sending our twins to that mountain school. Fo'teen going on fifteen, hain't they? And never a sick day till here when they go from home they git a ketching disease 'stid of the l'arning we sont 'em fer."

"I cain't rightly recollect just what the letter said," Mrs. Coggins puzzled from her spool bed in the corner of the cabin. "Why didn't we have Junior read it again befo' he went off with the boys? You don't reckon the chillen air powerful low and the president just hates to tell us?"

"Now, Maw," the squire pacified, "we've no call to git riled at the president. He sho give us a squar deal on our timber, and when the gals got to school he fitted 'em out till they kin hold up ther haids with the best of 'em. Likely he had no mo' notion than we had of ther gitting sick on him." But Saliny Lou was not to be diverted from her maternal misgivings.

"Wisht I could git outen this bed," she fretted. "You may be right about our not partakin' of our share of misfortune, sickness and sech. But I didn't aim to start with our Lizzie and Tizzie off thar among strangers. Lowlanders and furriners air likely runnin' that school with ther new fangled notions about measles—light, air, water and the Lawd knows what. These air all right for them as wants 'em, but I tell you now, I'm taking no chances on our gals being left deef and dumb or blind. Hit makes a diffe'nce if hit's you-uns or we-uns they're projeckin' with," complained the anxious one. "Saddle yo' mule, Paw, while I git the yarbs ready, and mind you bring them chillen home the fust day they're able to travel. They'll not see inside a school again till I say the word."

The baby's lips lapped contentedly as the mother buttoned her gown and laid him on the far side of the bed. She smoothed the coverlet, emptied her bag of treasures and selected such roots and twigs and seed pods as seemed indicated in the present emergency. The squire was soon on his way.

The next night two students dashed down dormitory stairs. "Miss Dean, thar's a man in Lizzie's and Tizzie's room and we can't git him out. Hit's time to give the girls their baths so they'll sleep good, but he has pulled off his coat,

By Frances Sage Bradley

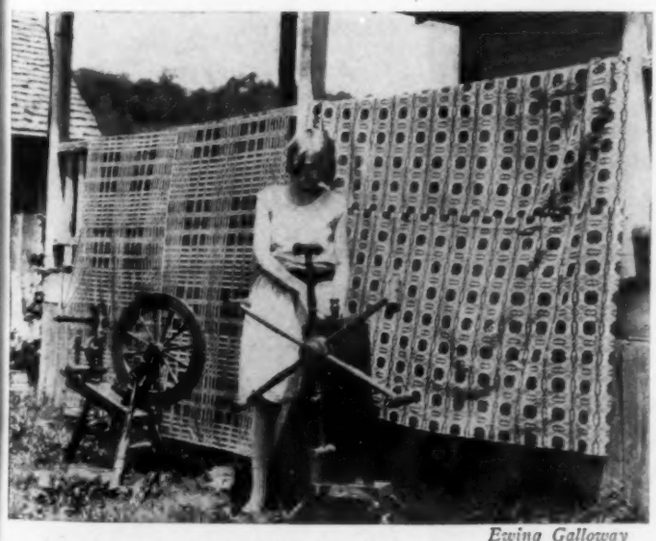
Junior high school students in the reading room at Berea College, Kentucky.

says he's going to stay the night, and he'll see that not a drap of water teches his gals."

And when the dean investigated, the squire confirmed the statement. It wasn't handy for his wife to leave home just now, but she had deputized him to relieve the school of further responsibility concerning the twins. Would Miss Dean show him the way to the kitchen, so that he could make some sassafras tea? Fumbling in his saddle bags, he produced a bunch of pink roots tied with rose madder yarn, a bottle of goose grease and a tin soda box containing chunks of mutton tallow. These must be melted together he explained, rubbed on the girls' chests night and morning, and covered with this red flannel. Should "pneumony fever" set in, he must change the goose grease and tallow to turpentine and lard and drench the girls with boneset tea in place of sassafras. These gray slivers were slippery elm for an ooze to be tied around their necks, and some of it strained and thinned with corn liquor for possible sore throats.

"No, thank you, ma'am, I've got ever'thing I need—'cept the kitchen," the squire said smiling. And with his precious herbs the stiff-jointed man followed the dean down the back way.

Explanations were useless and remonstrances futile. In Lizzie's and Tizzie's room father's word was law. But the tactful dean, rushed and weary with only untrained student help in the care of many sick girls, found the matter-of-fact man most helpful. He brought in wood and water, and carefully the clumsy old fellow carried trays of food up long flights of stairs. In the assembly room, converted now into a convalescent ward, he fathered many a shut-in girl besides his own.



Ewing Galloway

A mountain girl with her hand-woven coverlets and an old spinning wheel and winder.

Some of his charges were the daughters of friends and in-laws; others the descendants of sworn enemies with their heritage of feuds. He gave them the latest news of Eagle's Nest, of Coggins' Cove and Scaffold Cane, and proved a diverting and comforting ally during a tedious and prolonged period of quarantine.

Reticent, unmeddlesome even as the dean, Squire Coggins watched closely the progress of the epidemic and waited in vain for the dread complications his wife had predicted. He observed girl after girl recover promptly, comfortably, happily under strange new methods of treatment. Fearsomely; with many misgivings, the old man yielded at last to the advice of the president, the judgment of the dean, and urgent pleas of the twins and their friends to leave them at school until the end of the term.

The empty saddle bags flapped against old White Eye's flanks as he jogged along the ridge, through the coye, and out on the squire's special spur. But none could ignore the furry ears laid well back in solemn warning. Master and beast were apprehensive, pestered in their minds. How would it be possible to convert Seth and Louizy, convince Josiah and Mary Jane that all was well with their "young-uns" in the face of these "bardaceous" goings-on? Above all how

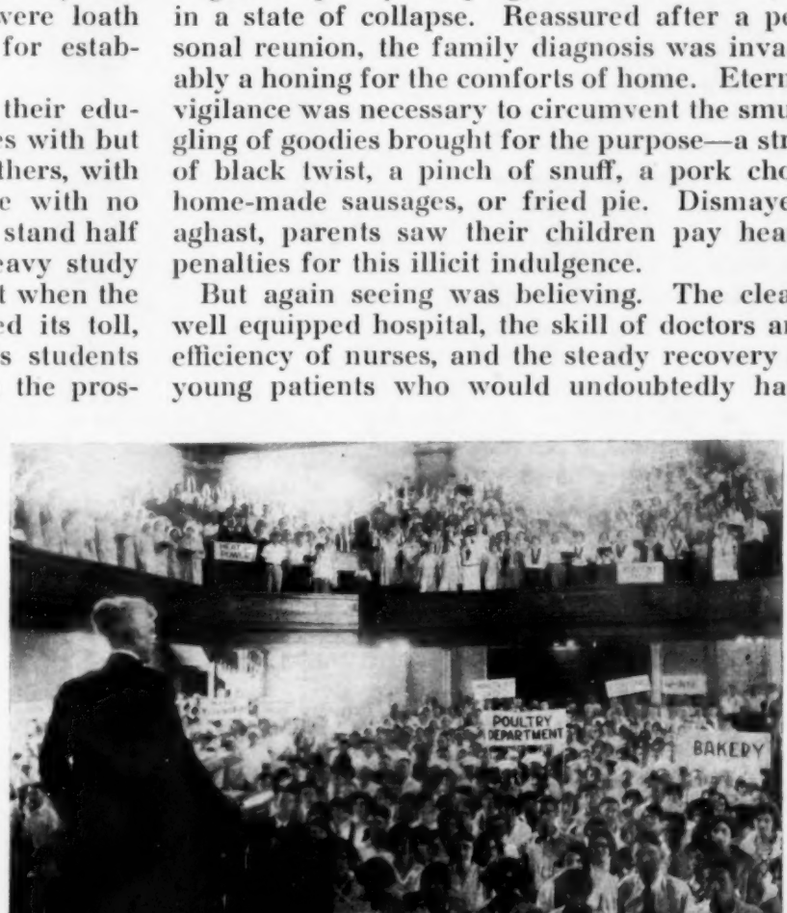
could he ever hope to make peace with "maw" back in the cabin on Nantahala? For this was back in 1909.

TEN years later the picture was changing, though even yet news seeped but slowly into remote regions. Men and women were loath to accept new and untried notions for established customs.

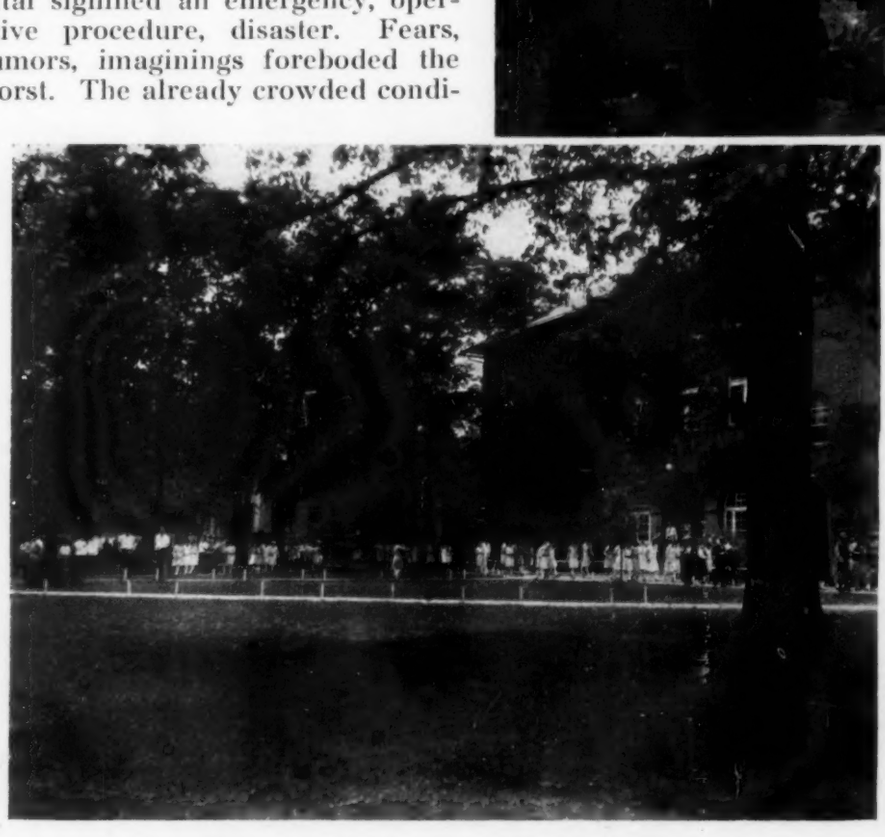
When girls and boys are earning their education, a few may maintain themselves with but two hours of outside labor a day. Others, with less money, work more; while those with no funds at all must be husky enough to stand half a day of work besides carrying a heavy study schedule. It happened, therefore, that when the influenza epidemic of 1919 demanded its toll, Berea College found hundreds of its students overtired and ill fitted to cope with the prostrating infection. The whole village came to the rescue. The wives of professors, of the preacher, the doctor and the carpenter were pressed into service. Some took patients into their homes. Others served fruit, eggs, milk, soup and such nourishing meals as might be compassed within the 11 cent limit. So long and insistent was the chow line that one might have imagined it organized for victims of a strike or of a flood.

A small hospital had been proudly acquired by the college, but to the mountaineer off in his cabin, hospital signified an emergency, operative procedure, disaster. Fears, rumors, imaginings foreboded the worst. The already crowded condition of the town was further complicated by an uncontrollable influx of panicky parents. At all hours of day and night they arrived on foot, on horseback, and in wagons. They would not be denied a word with their beloved child, who might be quietly sleeping, in wild delirium, or in a state of collapse. Reassured after a personal reunion, the family diagnosis was invariably a honing for the comforts of home. Eternal vigilance was necessary to circumvent the smuggling of goodies brought for the purpose—a strip of black twist, a pinch of snuff, a pork chop, home-made sausages, or fried pie. Dismayed, aghast, parents saw their children pay heavy penalties for this illicit indulgence.

But again seeing was believing. The clean, well equipped hospital, the skill of doctors and efficiency of nurses, and the steady recovery of young patients who would undoubtedly have



President Hutchins of Berea College addresses the school assembly on "Labor Day."



A campus scene at the famous college where the room rent is 65 cents weekly and the board is $2.75 or $2.50 depending on whether the appetite is male or female. Students number 2500.

died off in their cramped homes told the story. Mothers and fathers went back to the mountains with much to think of, much to discuss around open fires of winter evenings. Unconsciously the way was paved for active measures by returning juniors and their sisters. Brazenly these youngsters deserted age-old traditions and cried for county hospitals, for up to date doctors and nurses. Above all, they demanded to know why the city youth has at his disposal knowledge and science and skill denied his country cousin.

Ripe for Public Health Teaching

They were ripe for a national educational campaign along public health lines. This campaign did not stop with first aid classes or home care of the sick. In 1,900 of our 2,500 counties public health doctors and nurses taught preventive measures and the fact that most of our sickness and inefficiency may be prevented by the use of ordinary common sense. They taught the elements of hygiene and sanitation, the control of epidemics, the rudiments of clean living and stressed especially the weakest point in our national life—more intelligent care of mothers and young babies.

THE second decade in Appalachia was marked by a further test of the practicability of public health methods. In the spring of 1929 the students of Berea College found themselves facing a devastating epidemic of scarlet fever. From the first came batches of ten, twenty-five, fifty cases a day, until more than 400 patients made it necessary to add a girls' and a boys' dormitory to the limited facilities of the school hospital. Some said the institution must be closed.

This would spell calamity—unforeseen expense and complication to burdened young men and women. These were working students, many of them straining to meet obligations they would not shirk—borrowed money and promises to younger brothers and sisters awaiting their turn for a little schooling. A prolonged absence from classes either for illness or enforced quarantine might mean D's and F's to A and B students, might mean failure to prospective graduates who could afford neither time nor money to return another year.

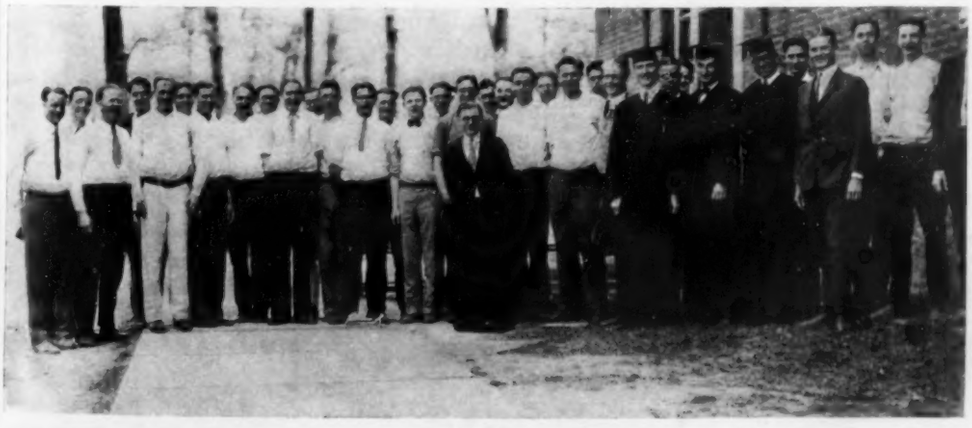
Did disgruntled fathers and mothers come, like Squire Coggins in 1909, bent upon taking their children home? Did despairing, panic-stricken families trek across the mountains as in 1919 to bid agonizing farewell to cherished sons and daughters? True, a solicitous mother could not resist a long distance warning to Otho to wear his asafetida bag day and night and for Lucilla Jane to take her sulphur and sorghum "regler." Another rushed a message commending roasted onion for ear complications. Rivers of tears flooded the countenance of a terrified youth away from home for the first time. And two lads fled the town.

But within twenty-four hours the governor was on the campus, so also were the president of the state medical association and the executive secretary of the state board of health with his epidemiologists, laboratory technicians, and clerical staff. The Dicks of Chicago came with the last word in scarlet fever research. And, of course, all local medical and nursing help responded.

Gloom settled down upon the 2,500 Berea students and the 200 commissioned and non-commissioned workers. None knew if himself or his buddy would come next. All were conscious of an undertow surging through the chapel which would sweep them back to the fastnesses of their homes. "Paw," the individualist, was their rightful health officer; "Maw," the born and bred prescriber for their ailments.

Prompt Action Required

The diplomatic president realized the necessity of acting promptly but warily. This was the severest test to which these young folk had been subjected. Nothing could be wished off on them. They must take the initiative. In few words President Hutchins explained that, knowing his mountain girls and boys, he knew without question they would meet this as they had met other problems of life, dauntless, level-headed, determined to win. But dreading scarlet fever as a dangerous and subtle foe he had called to their aid the best experts in the country, and he asked them to confer with these men and women on a program to insure relief from the epidemic. Then he introduced



A group of Berea College students, all except one of whom is 6 feet tall or over.

as the next speaker, their old-time friend and co-worker, the health officer.

Himself a mountaineer, this man intuitively felt the pulse of every youngster from the hills; knew he could lead but not drive them. Never for a moment mentioning his right promptly to quarantine the town, this wise man cracked a few jokes to relieve the tenseness of the atmosphere, then offered two suggestions for the consideration of the students. First, they could preserve their personal liberty and freedom at any cost by striking out for their own coves and spurs and thus spreading their infection far and near. Second, they could arm themselves by increasing the resistance of every teacher and pupil, stand their ground—and come out victorious.

The latter course, he explained, would not be child's play. It was the mountain way of meeting trouble. It involved a daily inspection of faculty and student body for detection of early, suspicious signs; the testing of every one's blood and the segregating of those found with a positive reaction to scarlet fever for five successive weeks of immunizing treatment. It involved even the segregation of all carriers as disclosed by examination of nose and throat cultures, though perhaps they were free from subjective symptoms. But they would run scarlet fever out of Berea.

The program necessitated a grave interruption of school at a critical moment and it was not easy to students already on the ragged edge. But did they balk, these girls and boys? For a moment there was hard thinking. Then up shot the hand of every mother's son and daughter, prepared to go the limit. Even a ripple of amusement lightened the solemnity of the occasion when they were given their choice of human or horse serum for inoculation. To the mountaineer a few ounces of blood more or less is of small moment. Enough was offered for Berea and also for the state normal college in a near-by town seeking similar protection.

They entered into this contract deliberately, individually, spontaneously. Seth expressed the feeling of others when he bared his arm and exclaimed: "Gee, if my paw knowed I'm taking this stuff (serum inoculation), I'd be in for a good licking." But they knew better, these boys, than to write home for permission to do something for which the old folk were not yet ready. And it is this revolt of youth, this taking the bit between their own teeth which puzzles the old gray heads but is going to be the salvation of Appalachia.

Several interesting points developed during the experience. Contrary to time-honored teaching that youth is peculiarly susceptible to scarlet fever, relatively more positive reactions were found among the faculty than among students. Relatively more were found among older students of the normal college than among those of Berea. Yet not a new case of genuine scarlet fever occurred in either of these susceptible groups.

Upon first thought one might attribute this to a possible immunity acquired by the youth of isolated regions. This, however, is not borne out by facts, for the promptness with which mountain families moving to mill towns succumb to communicable diseases is well known. A more likely explanation is that the percentage of susceptibles among Berea students might have been reduced by a great number of slight "scarlets" passing as the ordinary sore throats common in such institutions during the postholiday season. These, it appeared, had often occurred among roommates who necessarily live in more congested quarters than do either teachers of Berea or students of the more commodious state normal college.

The immediate drop in the number of cases, the lowered virulence, and the clean-cut control of what had threatened to become a flaming scourge proved a convincing argument to the student of doubting mind. After this experience Berea sent back into the mountains an army of girls and boys who understood perhaps why their fathers of an earlier day avoided the hospital as the city man does the morgue, yet now insist upon the modern, well equipped hospital; who appreciate perhaps the marvelous resourcefulness of pioneer days, but demand today well trained public health doctors and nurses who will educate the public in preventive rather than curative measures for such disasters as visited Berea in 1909, in 1919, and in 1929.

If this means a revolt of youth, then success to the revolt! May its clamor be heard in the land. Youth is redeeming Appalachia. If given a chance its courage and vigor, its contempt for the shams and hypocrisies of the past, and its gallant, relentless pursuit of the truth may be felt from shore to shore. It may even make the world safe for women and children.

Fashion and Motherhood

The First of a Series on Preparing for the Baby

EDWARD LYMAN CORNELL

THE battle between the shorts and the longs, or the contest between American and French fashions, is being watched with considerable interest by the obstetricians. The sensible dress that women of this country have adopted in the last twenty years, and especially the vast improvement in corsets, has been of inestimable assistance in the reduction of infant mortality.

The old-fashioned corsets of a generation and more ago are fearsome things to contemplate in the light of knowledge of the effect of present styles on the health and well being of mothers. It cannot be too strongly impressed on the women of this country that they must absolutely refuse to endorse any attempt on the part of fashion makers to lead them back to the long dust-sweeping skirts and body-constricting corsets of the past.

American women have shown fine strength of character in the last year or so in resisting the attempt of the fashion makers of Paris to force them backward. Their resistance has cost these fashion czars many millions until now the American designers have given up the battle and are prepared to make American women the clothes they desire. But there is always the attempt to go to extremes, and the prospective mothers of the country cannot afford to allow these attempts to gain any headway.

The prospective mother during the first three months of pregnancy need make little change in the type of clothing used. That usually worn now is quite satisfactory. Shortly thereafter it becomes necessary to change to larger garments. The main principle to bear in mind is not to bind the body anywhere. Nature has provided for expansion; therefore, direct opposition to nature is dangerous. Fortunately, the sane and sanitary dressing in vogue during the last ten years has been a great boon to the prospective mother because tight bodices, stiff, tight-fitting corsets and the small waistline have gone out, let us hope, to stay.

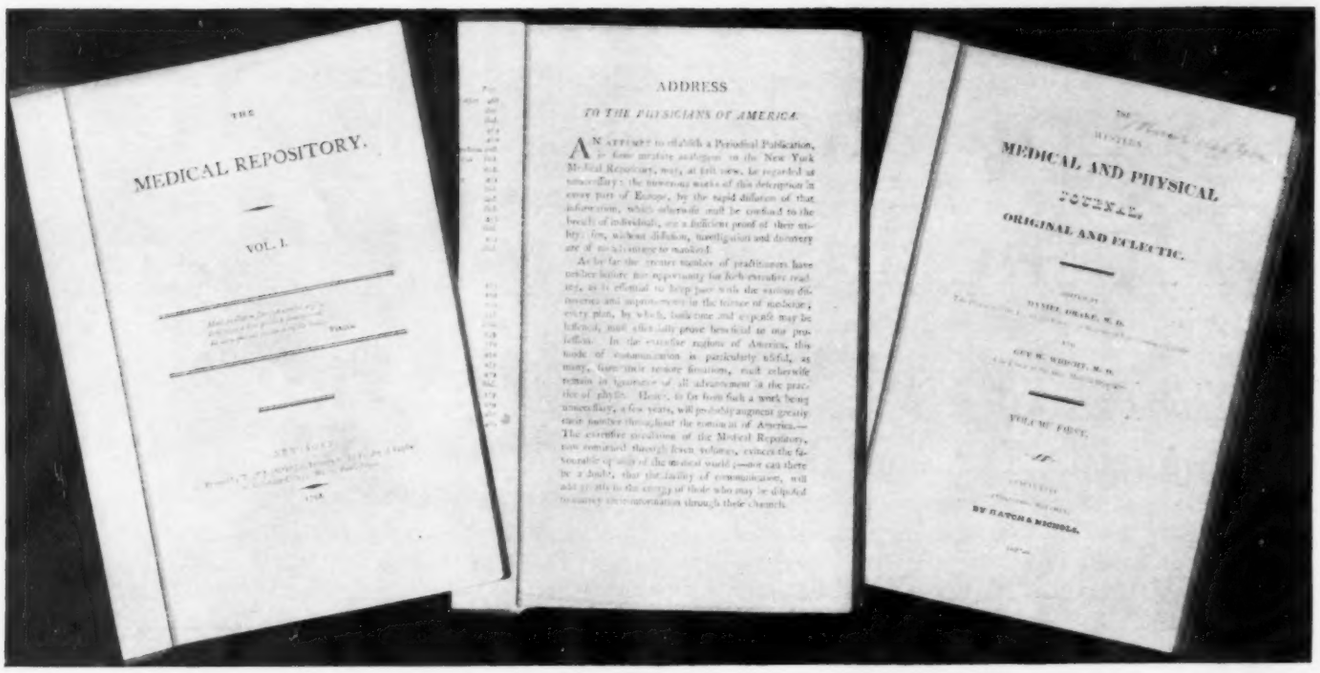
Inconspicuous dress is always in good taste and never more so than in the case of the prospective mother. Extremes in fashion are to be frowned on at this time even more than at any other.

On windy days it is advisable to wear closed garments next to the skin in order to protect the body from the dust and dirt of the street, which may contain harmful germs. Round garters or tightly rolled stockings should be avoided, since these may compress the veins of the leg and thus have a tendency to form varicose veins. If the prospective mother does not wear a girdle or a modified corset she can obtain satisfactory results with a garter belt. This belt puts pressure on the bony structures and does not interfere with the growth of the baby.

Shoes play an important part in the comfort of the prospective mother. French heels should be avoided, because the base is not broad enough to carry securely the growing weight of the expectant mother. It is not advisable to wear old or worn-out shoes or house slippers, as fallen arches may result. The feet grow during this period, and the shoes become tight. One should get larger shoes so that the feet may be comfortable.

To summarize briefly, wear clothing which does not bind the body anywhere but which is sufficiently protective. Wear the maternity corset or girdle or procure a garter belt. Wear comfortable shoes all the time.

If the physician advises a maternity corset see that it is fitted as expertly as possible and pay strict attention to having it rectified as often as is necessary.



Pages from the first issue of three of the earliest American medical journals—the Medical Repository, 1798; the Philadelphia Medical Museum, 1805, and the Western Medical and Physical Journal, 1827.

Some Early Medical Magazines

By Calvin T. Ryan

ALTHOUGH the doctors of the latter part of the eighteenth century shared in the ignominy of the professional classes of their day, they also shared in their desire to enlighten others. Magazines in those days were not conducted solely for profit to the publishers and editors or with the idea "of filling a long-felt want" but to give practical advice and to interest people in the cure of disease. Almost all the early periodicals published in this country were didactic in purpose. The history of medical journals from the first one published in Philadelphia in 1788 to the current issues of our present-day magazines shows an unselfish group of medical journalists interested in the cause they represent rather than in the pay derived from writing.

"Every state must have a bishop, every town a lawyer, and every parish two or three great surgeons and doctors," one observer of the day wrote. Lawyers, doctors and preachers were considered a useless extravagance in the trying years during and subsequent to the Revolution. Doctors were in ill repute because of their practice of robbing graves. Lawyers were an abomination to society because one of their chief duties was to collect debts. The clergy were just simply useless and therefore an extravagance.

Despite this attitude these three leading professional classes carried on. The doctors edited medical journals and contributed medical articles to other publications. The lawyers had their publications, and the ministers theirs. This was the age of the magazine both in this country and in England. McMaster, the historian, says that there were at least forty-one magazines started during the administrations of Washington and Adams. A fair proportion of those in specialized fields were edited and written by physicians and surgeons.

Almost all the magazines published in the latter part of the eighteenth and the first half of the nineteenth century, regardless of their general nature, carried health articles, or health departments or ran health hints. Many of these now seem curious even to a layman. Even that illustrious publication *Godey's Lady's Book* had a department on health conducted by a doctor. Mrs. Hale, "editress," conducted a department in which she discussed such advanced questions as female education and medical training for women, and even prophesied, "The Doctress will yet take her honorable place among Doc-

tors." Dr. Charles P. Uhle edited the health department, and in February, 1849, wrote an essay advocating exercise of a mild form for women. Carriage riding and croquet would probably be severe enough, the doctor thought.

There must have been no little popular interest in medicine, for nearly all the periodicals of the time published medical articles. Even the more literary publications and the religious magazines found that their readers needed instruction in health. Brown's *Literary Magazine,* in existence around 1800, printed a great deal of medical information and took an open stand against inoculation for smallpox. The yellow fever epidemics in Philadelphia and New York brought forth much discussion in all kinds of periodical literature of the time. The newspapers blamed the administration for its conduct in handling the pestilence, and one William Cobbett through his *Porcupine's Gazette* made scurrilous attacks day after day. Dr. Rush brought a charge of libel against Cobbett and won his case.

While the people hated the doctor, they couldn't live without him; consequently he flourished. The United States by 1818 was "peculiarly the land for physicians," says a writer in the *Medical Repository* and gives his reasons to substantiate his assertion as being: "The inhabitants are almost constantly in a state of repletion, by stuffing and cramming, and by the use of stimulating drink."

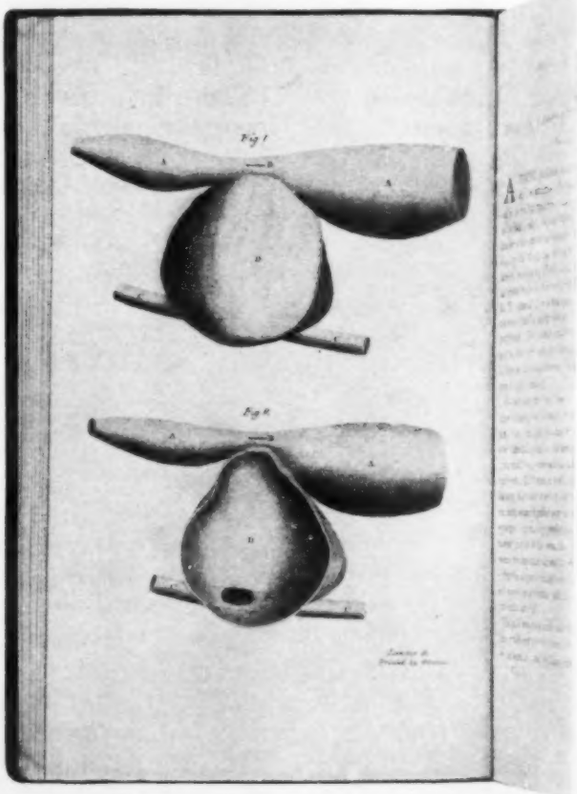
He then says that the people of the United States consume more animal food than any other civilized nation and observes that "the quantity of ardent spirits drank by our people, exceeds everything of the kind, that the world can produce; the appetite for inebriating drink seems to be increasing and insatiable."

The Journal of Health, a periodical "conducted by an association of physicians" in Philadelphia, which ran from 1829 to 1833, was among the first to popularize good health and medical information. The editors advocated the necessity of fresh air for health, but thought sleeping exposed directly to the night air an unreasonable and dangerous practice. A person interested in good health would not be tempted by the fineness of the evening to sit up till midnight "and as a consequence to lie in bed in the morning." Opposing tobacco and liquors, it listed among its "Dangerous Practices" any recourse "to morning bitters, drams or antifogmatics of any description." Healthful clothing, wholesome food and the proper correlation of mind and body were the necessities of perfect health.

The opposition to doctors had largely disappeared by 1831, and Dr. Enoch Hale wrote in the *North American* for April of that year, "We believe that there never was a time, when they (doctors) were held in so high respect and confidence as at the present day and probably in no part of the world is this confidence more generally felt, than among us." In the Middle West, however, we find Dr. Charles Caldwell deeming it necessary in 1826 to write a pamphlet entitled, "Defense of the Medical Profession Against the Charge of Irreligion and Infidelity." Certainly the busy professor would not have constructed a man of straw just to tear him apart; therefore, there must have been some feeling against the medical experts at least in some sections. The opposition has shifted from that of grave-robbing to being irreligious.

The home of medicine in the United States during these years was Philadelphia. For a long time it was the leader in medical journals. Here the first medical journals appeared. There seems to be some conflict on this claim, however. McMaster, the historian, says that the *Medical Examiner* appeared in Philadelphia as early as 1788, and was followed by the *Philadelphia Medical and Physical Journal* and the *Medical Museum.* Prof. Frank L. Mott says in his voluminous history of the American magazines that the *Medical Repository,* a New York quarterly, was the first medical journal in America, and it appeared in 1798. There were so many journals that never were published the second time, it may be that Professor Mott has ignored such and begun with the *Medical Repository,* for that was published from 1798 to 1824.

The *Medical Repository* was edited and very largely written during its early years by three physicians, all of whom were



Probably the first illustration to appear in any American medical magazine. It accompanied an article by Dr. Philip Syng Physick on a case of aneurysm and was printed in the Medical Museum in 1805.

able men and members of the Friendly Club. Samuel Latham Mitchell was trained both in law and medicine, was a member of Congress for twelve years, and was a United States senator by appointment. Elihu Hubbard Smith was one of the Hartford wits and wrote some fairly creditable verse and published an opera. Edward Miller, the third member, possessed both literary and scientific gifts.

This periodical was devoted largely to the study of epidemics, expecially that of yellow fever, which was then common and of which Dr. Smith died. It was authoritative and highly regarded both at home and abroad. Most of the early issues were written by the editors, but soon contributions were offered by most of the prominent physicians of the time.

Dr. John Redman Coxe, editor of the Philadelphia Medical Museum, was the first to use illustrations in his magazine. In presenting the first volume in 1805, he says: "The addition of the Engravings, unpromised in the prospectus of the work, (whilst they add so greatly to its value, and are so creditable to the improvement of the arts amongst us;) must be considered as a strong proof of the desire to render it of as much utility, at the most moderate expense, as lies in our power."

Most of the medical journals of the time were closely related to some school of recognized standing, such as the *Western Medical Gazette*, begun in Cincinnati in December, 1832, "the firm advocate of the Medical College of Ohio." There were, nevertheless, by the first quarter of the nineteenth century appearing some commercialized journals and some giving publicity to the unorthodox systems of medicine, such as the Thomsonian group and the *Botanical Luminary*. *Jewett's Advertiser* was published in Columbus, Ohio, in January, 1835, and was a commercialized medical journal.

Of the *Journal of Health* I have already made some mention. The *American Quarterly Observer* by 1833 was interested in physical culture. The magazine of this popular group that laid claim to the largest circulation was the *Water-Cure Journal and Herald of Reform*, begun in 1845 in New York. Its appeal must have been varied, for it ran articles on physiology, pathology, hydropathy, and physical, moral and intellectual development. Professor Mott says that a number of "herb doctor" papers, patent medicine journals and the like were begun in the second quarter of the nineteenth century.

On the whole, nevertheless, the medical profession in the United States has always been well represented by its periodical literature. It has produced more in this field of writing than has either the legal or the ministerial profession. Doubtless today neither the ministry nor the law is so well served by specialized magazines and professional journals as the medical profession is. Both the lawyer and the clergyman must rely largely upon tradition, must of necessity be ultraconservative; whereas the medical man, in whatever branch he may specialize, must be ready to experiment, to keep up not only with the science of medicine but with the whole field of science as well. He must be a physician of the mind as well as of the body. To keep himself informed he must rely largely on the scientific and professional magazines of the day.

The illustrations used with this article are from the personal collection of Dr. George H. Weaver of the McCormick Institute of Infectious Diseases, Chicago.

PROBLEM for the PSYCHIATRIST

She kept the little cupboards of her mind
Spotless, with an unceasing diligence,
And, spinster souled, dwelt tidily behind
The delicate closed doors of reticence.
Her orderly emotions she arrayed
In rows, each in its separate labeled jar
Like jelly; and her calm desires she laid,
Carefully pressed, away in lavender!

But in a corner of a secret shelf
She kept a vial, wrought in curious fashion,
The deadly brew of a most bitter passion—
And no one ever knew, besides herself,
What agony of care she had to take,
Lest, some unguarded hour, it leak or break!

—SARA HENDERSON HAY.

Metals That We Eat

By Lawrence H. Baker

EVER since chemistry first tackled the big task of analyzing organic materials, somebody has come forth every now and then with a new statement of the composition of the human body. The physiologies of our school days told us that, like old Mother Earth, the human body was more water than solids, and that the solids were mostly the mineral substances found in the bones. In recent years these solids have been more closely inspected, with the result that at least one uncomplimentary chemist has enumerated the elements found in them and has told us they could all be bought for a few cents at any of our corner drug stores.

Minerals as well as vitamins add value to milk as a food.

Little deterred, however, by the cheapness and the baseness to which further research may reduce the noble human form, the chemist is continuing his analysis; he is finding that, although the materials used in it may embrace many simple elements, the facts relating to their use become more and more interesting the deeper the research goes. The human body is no longer under analysis merely to find what quantity of hydrogen, nitrogen, calcium or whatnot it contains. That form of academic inquisitiveness died out pretty soon after alchemy gave up the search for the elixir of life. From the point of view, however, of trying to determine the dependence of normal, healthy life on the elements presented by the world in which we live; that is, of trying to determine what are the essentials for the building and maintenance of a sound, efficient body, we are being analyzed more today than ever before.

How to retain the valuable minerals in cooking is a nice problem for the housewife.

In this analysis, perhaps the greatest amount of attention is being directed to the large and complex rôle played by foods. The newest subject of this attention at the present moment is the importance of the several metals in normal nutrition. This question is now being studied by some of the foremost investigators in chemical hygiene in a number of laboratories in this country and abroad.

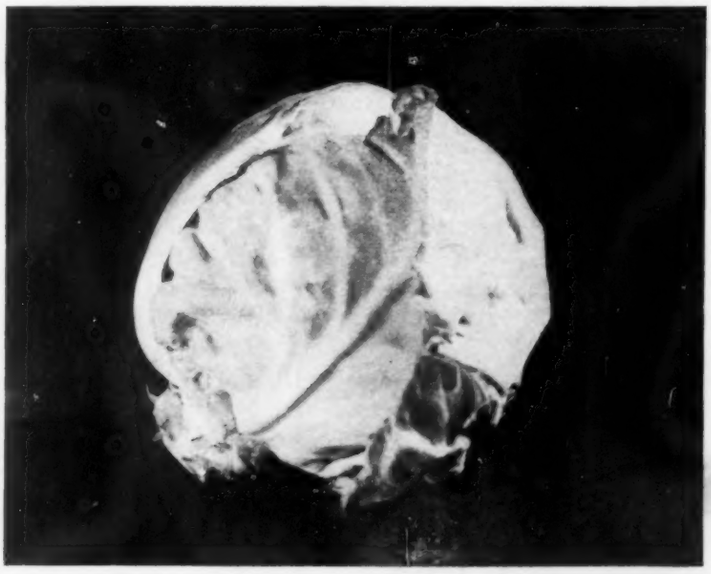
In presenting some of the interesting aspects of these studies and their results, it is perhaps just as well to commence with that metal which is found in in the earth more abundantly than any other. This is aluminum, for aluminum is the most widely and most generously distributed metallic element in the earth's crust. It constitutes about 7.3 per cent of this crust, according to estimate, whereas iron and calcium, other abundant metals, constitute only 4.2 per cent and 3.5 per cent respectively.

Naturally it has been assumed by investigators that

an element so ubiquitous as aluminum must have a pronounced effect, whether good or bad, on all living matter. In recent years this element has assumed an increasingly conspicuous place in human environment. The vessels in which our foods are cooked are made of it. It is used in the purification of water. It appears in baking powders and in medicinal products. In view of the great increase in the utilization of aluminum, there is small wonder that serious consideration is being given to its possible biologic significance and to the effects of its salts in the diet.

Medical opinions concerning the metal have differed widely. Some good authorities hold that its presence in the diet makes for better growth and that it is perhaps even essential to reproduction. Other authorities, equally good, assert that aluminum in the diet is absorbed by the blood stream and carried to various parts of the body, where it produces dire effects.

In the laboratory of Dr. E. V. McCollum, professor of chemical hygiene at the Johns Hopkins School of Hygiene and Public Health, an attempt has been made to determine the value of these opinions. With his colleagues, Rask and Becker, McCollum recently conducted experiments the results of which show that aluminum, even when abnormally abundant in the diet, exerts no harmful action on growth, reproduction or general well being, that it is not an essential of either plant or animal matter and that it is not absorbed from the stomach or intestinal tract.



Briefly described, his experiments were as follows: a number of vegetable materials—wheat germ, navy beans, lima beans, potatoes, carrots, cottonseed meal and hen's eggs—were analyzed spectrographically and found to contain no aluminum whatsoever. This part of the experiment established the absence of aluminum in the materials and indicated foods for the rats that were to be fed an aluminum-free diet.

Next, two colonies of rats were called on to furnish the "proof of the pudding" by their eating. One colony was fed an aluminum-free diet. The other received identically the same diet, except that the scientists mixed aluminum compounds into it, sometimes with a heavy hand. Both colonies were raised through mature life, through the miracles of growth, development and reproduction. There was no difference whatever between the two colonies; and both of them were as consistently healthy and normal as if they were not experimental animals in a laboratory.

When enough data had been collected to show the effect of aluminum during life, the rats of the colony which had been fed the metal were killed and spectrographic analyses were made both of entire bodies and of separate portions and organs. Only on the skin, in the lungs and in the alimentary tract was aluminum found and in these parts it was invariably present. It is argued that these parts are constantly exposed to dust, dirt and other foreign substances, hence the presence of aluminum in them. In the skeletal bones and muscles, livers, spleens, kidneys and other parts not coming directly into contact with air or food, no aluminum was found. It is argued, accordingly, that such aluminum as goes into the body passes out of it again and is as inconsequential as the sparrow that flew over the housetop yesterday.

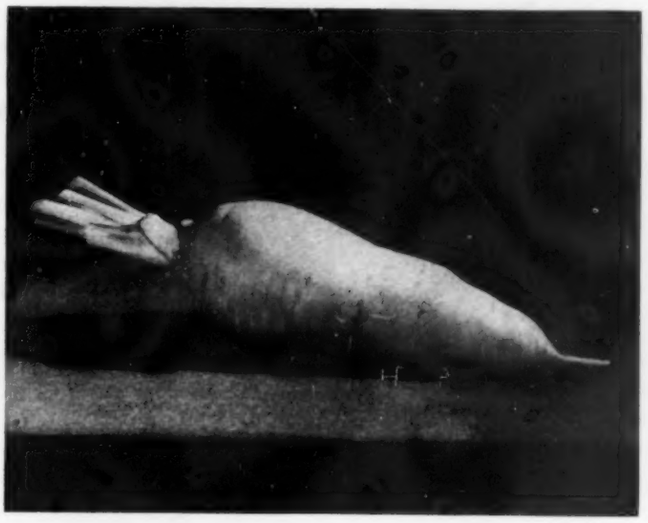
In the light of these investigations it appears that the housewife need have no qualms when her erstwhile discolored aluminum saucepan shows up bright and shiny after the tomatoes are stewed in it. But perhaps this light will be a trifle more illuminating if a little explanation is given for that mysterious term "spectrographic analysis."

Spectrography is one of those marvelous points in modern learning at which physics and chemistry join. It is the recording of the presence of an element by the light it produces. Following Sir Isaac Newton's fundamental work on the spectrum in 1666, when he showed that the rainbow colors displayed when sunlight passes through a prism are the component rays of that light, it was noticed that when certain metallic salts were fed into a flame, such as that of an alcohol lamp, characteristic colors were produced.

In 1822, Sir John Herschel observed that if such flames were examined through a prism, the light was resolved into single rays and that bright lines were visible on a dark ground. It was noticed, for example, that when common table salt was fed into a spirit lamp, there was obtained a yellow spectrum line that corresponded to a line already observed in the solar spectrum. Soon it was established that each of the chemical elements tends to emit definite rays when "excited," or heated to incandescence, the

nature of the ray being peculiar to the element. With this much knowledge, the scientists of the day embarked on enthusiastic attempts to discover the natures of the several heavenly bodies by analyzing their lights and identifying the elements they possess in common with the earth.

This seems a far cry from the analysis of anything so mundane as food, but these attempts led to the mapping of a solar spectral chart which, arranged by Angström and perfected by Rowland, is as infallible as Sherlock Holmes and as accurate as the multiplication table in the detection of chemical elements. In McCollum's experiments, the materials studied were burned to ash in silica dishes over a Bunsen burner, the ash was "excited" in a 20,000 volt spark and the spectral results were observed and photographed. What could be simpler! This method, in addition to offering a maximum of accuracy, permits the scientists to deal with infinitely small quantities of material.



The metals that man takes into his body, either by unavoidable erosion of his cooking utensils or by deliberate admixture with his foodstuffs, are not limited to aluminum; and it is Professor McCollum's plan, therefore, to go through the whole list of elemental metals and test their relation to life by much the same methods as those applied to aluminum. In the immediate future his plan calls for tests of such frequently used metals as alum, manganese, zinc, nickel, fluorine and cobalt. Manganese is widely distributed throughout the plant kingdom and enters the human body in man's consumption of plant foods. Probably no plant is free from it. Zinc is also widely distributed but is found more abundantly, perhaps, in sea foods than elsewhere. Traces of nickel and cobalt are found in a wide range of foods, and fluorine enters into practically every natural food man eats. In the body, fluorine is especially abundant in the enamel of the teeth and a little less so in the dentine, the bones and the soft tissues.

The difficulty encountered in the analysis of many metals, however, is that they are not readily procurable in absolutely pure states and the foreign substances, though infinitesimal, are sufficient to disturb the scientist's accuracy-loving conscience. With the exception of gold, a little copper and still less of silver, metals do not exist in nature in a pure state, but as chemical compounds from which the metals have to be extracted. And the industrial processes of extraction do not aim at scientific purity. The search now going on for pure metals to use in these tests is an interesting chapter in the history of the scientists' patience and perseverance.

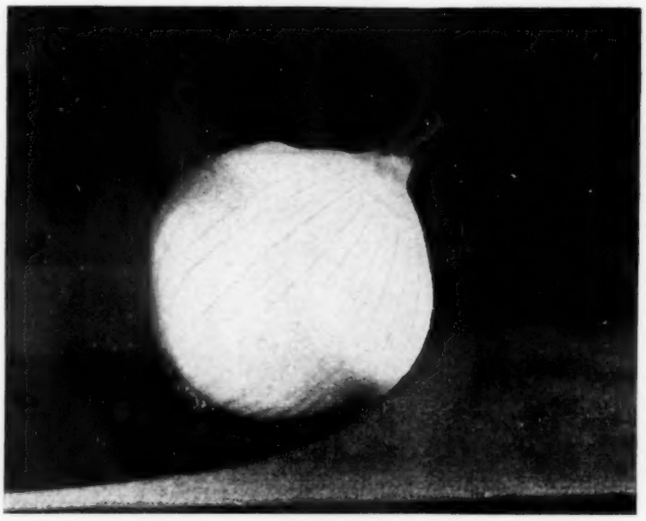
Next to aluminum, the metal that the body meets most frequently is iron. The necessity for iron in life has long been realized, for it is this metal that contributes the color to the red blood cells and serves as the carrier of oxygen in the blood stream. In plant life, iron is just as essential. Without it, the leaves lose their color and the plant dies. In the chlorophyll of plants, magnesium performs a service equally as vital as that rendered by iron in hemoglobin, but the magnesium cannot be utilized without iron. Chlorophyll is the constituent of the plant which gives the characteristic green color and performs the vital work of utilizing sunlight and elemental substances for the miraculous manufacture of starch, the chief food of plants.

Recent investigations at the University of Wisconsin department of agriculture, under Waddell, Elvehjem, Steenbock and Hart, have revealed interesting facts pointing to a similar interrelationship between iron and another metal in human economy. Their investigations started with causing pronounced anemia in rats and then feeding various substances and watching for increases in the red blood cells. The anemia was produced by feeding the rats exclusively on cow's milk, and this diet proved so satisfactory for the purpose that after from six to nine weeks a majority of the animals under study died. Some of the rats, however, were fed the ash of dried lettuce, and their condition changed for the better. On analysis, this ash was found to be rich in iron.

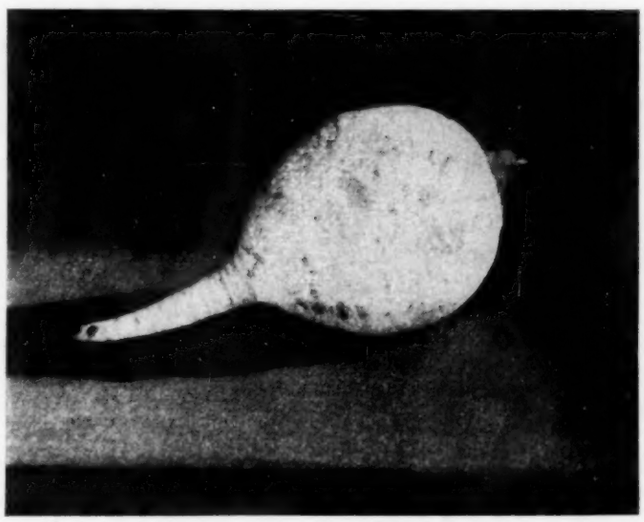
Having come upon this fact, the investigators sought a more direct route to restoring the rats to normal condition, and added inorganic iron salts to the milk diet. The expected improvement, however, failed to occur. On the other hand, when the anemic rats were fed beef liver, lettuce and corn, there was an increase in the hemoglobin level. This awoke the suspicion that some other inorganic substance in addition to iron was vitally concerned in the building of hemoglobin.

The ashed materials were closely observed, and a pale bluish color was noted in some of them, particularly the ashed lettuce; and the

suspicion consequently was thrown on copper. Now it is known that in some of the mollusks and crustaceans, copper exists as an integral part of the compound hemocyanin, which behaves as a respiratory pigment—an oxygen carrier—similar to hemoglobin in the higher animals. On a venture one anemic rat was fed in addition to its milk 0.25 milligram of copper in the form of copper sulphate and 0.5 milligram of iron in the compound ferric chloride. The response was surprising, and the two metals therefore were added to the diets of more of the colony. Their appetites increased, their coats became smoother, and they showed much vigor and activity. These experiments have determined an entirely new rôle for copper among the higher animals, for although it has been known for a long time that copper exists in the tissues it is only now that it has become recognized as essential to the metabolism of iron.



Subsequently feeding experiments with copper were made on guinea-pigs and dogs by Flinn and Inouye of the department of physiology of Columbia University, who observed that when copper was added to the animals' diet the oxygen-carrying capacity of their blood was greatly increased.



Encouraged by their results with copper, the investigators at the University of Wisconsin department of agricultural chemistry extended their feeding experiments to a number of elements found widely distributed in plant and animal tissue. An attempt was made to elucidate the function performed in the body by some twelve elements: zinc, chromium, germanium, cobalt, nickel, tin, lead, cadmium, mercury, antimony, arsenic and manganese.

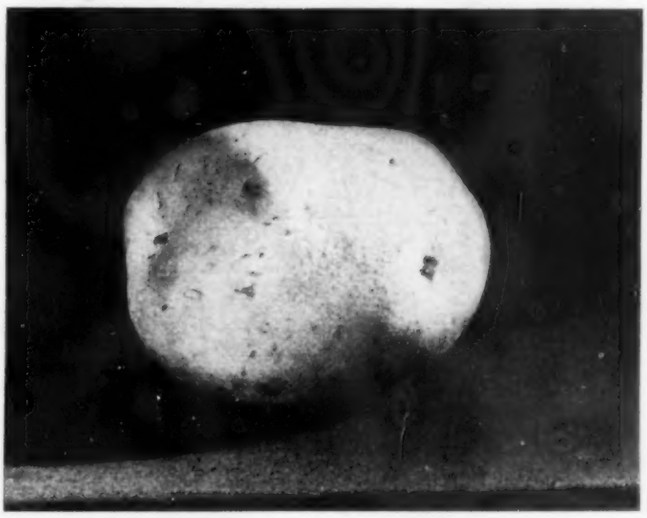
Groups of rats fed on a basal diet of milk and iron were given the pure salts of the elements just named and the changes in physical condition were noted. At the end of five weeks, four out of the six rats given cobalt were dead. Another group of six, to which arsenic was fed, lost two members in the first week. One rat of this group showed some stimulation of blood formation, but of the remaining three, two died within eight weeks. Apart from these two elements, cobalt and arsenic, the feeding experiments produced results which were regarded as negative, indicating that as far as these experiments go the elements tested have no definitely assignable rôle in body function.

The experiments that have been described in most instances started with anemic rats and tried various elements to determine their action or lack of action in remedying the impoverished condition of the blood. In view of the splendid results recently observed in the feeding of liver to human sufferers from anemia, it was natural that the investigators should try liver on their colonies of anemic rodents. The Wisconsin scientists fed dried beef liver to some of the animals and noted improvement in their condition. On analysis, however, it was found that the iron contained in the liver was low as compared with that found in the ash of lettuce leaves, so that apparently the metallic content is not the factor that makes liver so potent a substance in combating anemia.

Once a piece of plant or animal tissue is found to yield a substance possessing medicinal value, scientists—the biochemists, the pharmacologists, the physiologists and the numerous other chasers of the atom and the molecule—seek to isolate the active principles and reduce them to their utmost simplicity. This is not entirely an academic laboratory exercise but a pursuit that is often fraught with good for humanity. For in nature these principles are almost always mixed with impurities which at best may retard their action or at worst may be actively poisonous and harmful. Therefore it becomes important to isolate and purify the medicinal product.

Scientific isolation and purification place at the disposal of the physician a more potent drug, which he can administer with something like surety and confidence. Illustrations may be found in the history of epinephrine, and in the numerous modifications of cocaine. Only recently insulin, the active principle of the pancreas so valuable in treating diabetes, has undergone this search, and pure crystals of it have been isolated. The crystals of insulin, by the way, have been subjected to analysis; and the element found most decidedly present in them is a highly unstable form of sulphur.

Since it was first observed that the feeding of large quantities of liver to anemic animals was followed by an increase in the concentration of red blood cells, liver has been chemically dissected to discover the substance or substances which produced this salutary effect. Much of the dissection has been conducted by Cohn, Minot, Alles and Salter of Harvard University School of Medicine. The methods involved and the results of the separate portions of the work would be tedious to explain, but they have shown that the active principle of liver is soluble in water, insoluble in ether, and that it is precipitated in alcohol.



So far, the best that can be said for it is that it is either a nitrogenous base or it is a polypeptide, of which 0.6 gram a day has sufficed to produce a pronounced response in the anemic patient. While this is undoubtedly significant progress, it concerns normal nutrition only so far as it has appreciably changed the economic status of beef liver and calf liver. There was a time when the butcher gave it to the marketing housewife as a present for her pet cat or dog. Soon it will be on sale only at the delicatessen shops.

Two other elements have long since demonstrated their importance in nutrition and growth. These are calcium and phosphorus, without which the bony framework cannot develop and life cannot proceed. If the calcium content of the blood falls below certain levels in adults, the dangerous condition of acidosis sets in, and death is likely to ensue. Should there be any disturbance of calcium and phosphorus nutrition during parturition or early childhood, there follows the serious disease of rickets, with its characteristic bow legs, pot belly, pigeon breast and "rickety rosary" along the sides of the chest where the ribs join the cartilage.

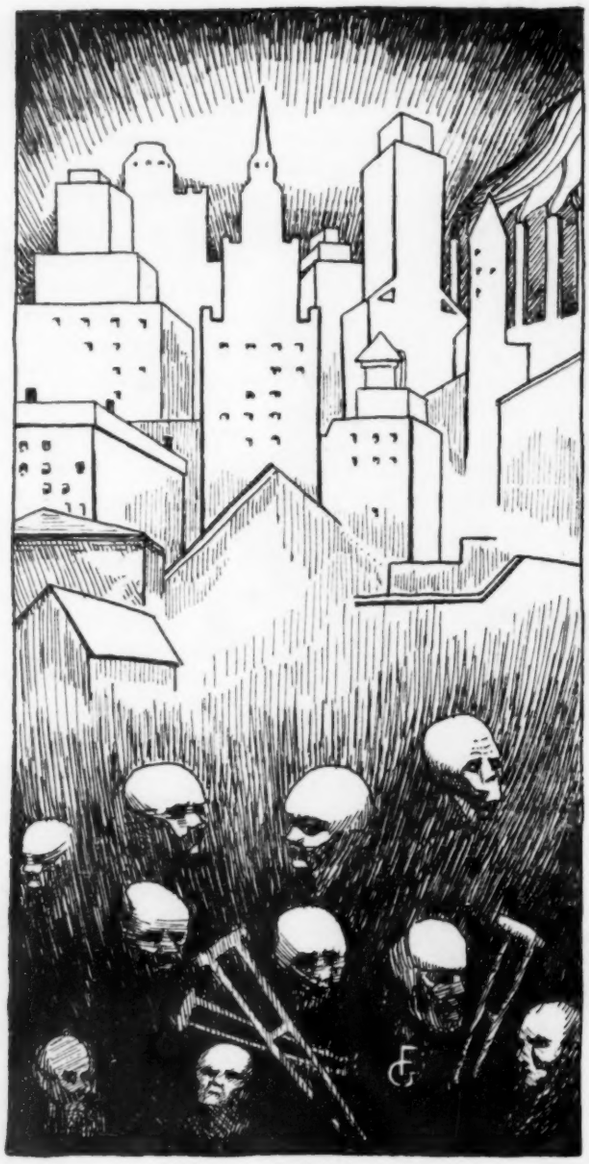
It is in connection with rickets that, from the point of view of the laboratory, those mysterious factors called vitamins come most strongly into prominence. There is an abundance of calcium and phosphorus in the foods that compose a normal human diet, but without sunlight or the ineffable substance contained pronouncedly in cod liver oil and to a less degree in a few other products, the calcium and phosphorus cannot be adequately utilized. This vital substance—active principle, one might almost term it—of the cod is vitamin D, the discovery of whose behavior has worked tremendously toward the elimination and alteration of a disease which is held to afflict from 50 to 80 per cent of the children in temperate zones.

Vitamin D, however, is only one in a highly significant group of six. Strange to say, it is almost impossible to speak of the vitamins in positive terms. When they are present in the diet in satisfactory quantities, health proceeds so normally as paradoxically to arouse no interest. It is when one of the group is not present, or not present in sufficient quantity, that something undesirable happens.

Should vitamin A be lacking, various unpleasant eye symptoms manifest themselves; if B is insufficient, beriberi attended by nervous disorders sets in; if C is absent or inadequate, scurvy, the plague of the days of the old sailing vessels, appears; if E is not supplied, the race fails to reproduce; if G is absent, pellagra sets in along with certain unpleasant skin troubles.

Inexact as modern knowledge of the vitamins may appear, perhaps no knowledge emanating from the laboratory has done so much to place human diet on an intelligent and logical basis. The appetite, as is now known, may be amply satisfied and sufficient calories to energize a horse may be dumped into the human stomach, but if the necessary vital elements are not present the man will starve to death.

Not only have the vitamins put life and understanding into the human diet but they have vitalized the chemical researches into that diet; for the present investigations of the rôle of the metals, as well as numerous other investigations now in progress, have been stimulated by them. And when one considers the complexity of human foods, one can well understand how tremendous is the need of sound, reliable facts concerning it.



Towering levels of mundane success are reached only at the cost of more and more physical and mental suffering.

The High Cost of Personal Neglect

By J. BAYARD CLARK

IT IS perfectly obvious in larger communities—and we are now more than half urban—that the general practitioner of medicine has been to a large extent lost in the shuffle; else why the ubiquitous complaint: "We have no family doctor"?

It must be ruefully admitted that society has been going through a rather awkward period of readjustment in respect to its medical care, while the medical profession, suffering from growing pains, has somewhat self-consciously been going through a sort of scientific pubescence. The immediate result of this has been a large crop of specialists and a relative paucity of general practitioners.

It is not a difficult matter to understand how this unhappy condition of things has come about. The idea of making oneself more proficient in some single field of a rapidly expanding professional knowledge has naturally lured many on to specialism, while an admiring public sat by applauding the marvelous results of more exact knowledge and increasing technical perfection. With the applause the general practitioner soon found himself in increasingly narrower quarters, as the public, charmed by an apparently beneficent change, clamored for more special workers.

Is it surprising that we shortly found large numbers of general practitioners sitting in specialists' skins—how else were they to procure a living?

Today it has become blatantly evident that specialism is being overdone. A recent large scale survey of the ills to which flesh is heir shows plainly enough that the great majority of all sicknesses are due to minor accidents or straightforward and well understood infections that, while requiring medical attention, do not in the least need the services of a specialist. This is a fact that is of much public interest just now, and it leaves no doubt that what is most needed is the return of the family doctor, the reliable medical adviser who can carry the family or the individual safely through pretty nearly all the sicknesses that occur, and who knows when and where to procure the aid of the specialist when needed.

But I seem to hear the cry repeated: "There are no longer any family doctors in existence!" As a very sad matter of fact there are more physicians in the United States per thousand inhabitants than in any other country in the world. It will not be hard for the reader to guess why as he reads on.

The thing of importance just now is to reestablish the economic balance between medical need and medical care, which in the recent extensive growth of medical knowledge has been so largely lost.

The vital question, then, that presses is, How can this satisfactory balance be brought about? Before answering that question there are two things to be spoken of, things that the public at large has been far too slow for its own good in comprehending. *1.* The first is that the much neglected general practitioner of present-day medicine is from the point of view of actual knowledge and performance a vastly superior person to our dear old family doctor of two generations ago. If he weren't thus superior he never in the world could pass the strict requirements of a modern medical education and become a licentiate to the practice of his profession. That is an item which is far more favorable to the general interest than is generally appreciated. The graduate of today or

The old family doctor plodding through the snow is gone if not forgotten. But the much neglected present-day general practitioner is far superior to him in knowledge.

the older practitioner who must needs keep up with the procession is a veritable miracle worker when compared with the family doctor of the past. If this were not so the present intricate business of keeping our closely packed communities from incessantly breaking out with devastating plagues and epidemics could never be accomplished. So much, then, for the present-day doctor in relation to our general health and welfare.

2. The second item has to do with our personal interests in matters of health, and in this regard most people are as little appreciative as they are in respect to the problems of collective well being. They little understand the value and economy of keeping in good physical and mental health and they seem to have no idea whatever of the meaning that hangs from the simple term "positive and exuberant health," which might free them from so many of their shackles and give them that keen enjoyment of living so seldom observed in this land of aimless haste.

The general disregard of this factor of personal health is made terribly clear in the steady yearly increase of both mental and bodily disablement. While the public health officer and the medical profession keep down the decimating diseases of an epidemic nature, individuals, forgetful of this blessing and regardless of their own best interests, do nothing at all personally to hold back the steady forward march of their own degenerative ailments and insanities.

This gruesome mistake is doing more to blot our reputation as a people of some degree of common sense than almost any other hasty and foolish thing in which we are at the moment indulging our fancy. To go on ignoring the steady year by year increase of self-neglect afflictions such as heart and arterial diseases, to accept without any effort of personal prevention the mounting toll from cancerous growths; and, worse than either, to take as a matter of course the alarming increase in numbers in our lunatic asylums does not show quite the quality of intelligence we like our European neighbors, for example, to think of us as possessing.

Big cities, big buildings, big business and big fortunes may all be very well as evidences of our superiority but the estimate of that superiority is likely to be somewhat diminished when it is understood that these towering levels of mundane success are reached only at the cost of physical suffering brought on by more and more cancers, or by sudden and premature deaths brought on by more and more heart failures, or by more and more chattering inmates behind the bars of our asylums already filled to overflowing.

These facts are pertinent at this particular time when the general cry goes up, "We have no family doctor"; and it would, indeed, seem as if at the present moment the public is in sore need of some sensible medical direction and advice of a personal nature.

When the periodic health examination, as carried on by the family doctor, is held up as the readiest way of procuring for the family exactly that which is most needed today in the way of a general physician and ever available

personal adviser, it is not to be supposed that this ingenious plan was expressly originated for the present emergency. We may not take that unction to ourselves of this generation, for as far back as 1861 Horace Dobell, M.D., delivered lectures at the Royal Infirmary for Diseases of the Chest in London on this very topic. Had his urgent and practical appeals that every one should have a periodic stock taking in regard to his health assets and liabilities been then and there established as a universal custom there might not be the steady mounting poverty in the matter of health we stand witness to today in this country. I invite you to listen to his own words as trenchantly put forth in the following few paragraphs of a lecture:

In 1861, Horace Dobell was a champion of periodic health examinations.

"Now, Gentlemen, I am perfectly convinced, from my own observation and experience in practice, that patients never think of consulting their doctors till these conditions of impaired general health have advanced far enough to have been developed into some form of disease; that thousands and thousands of people, believing themselves to be in health, are nevertheless undergoing these early, occult, and evasive stages of defect in the physiological state; and that such persons may be considered to be in health, not only by themselves, but by any one accustomed to associate with them, even though it be a physician, and that even if they submit to a medical examination as ordinarily conducted, they may be declared to be in health.

"I wish, then, to propose, as the only means by which to reach the evil and to obtain the good, that there should be instituted, as a custom, a system of periodical examination, to which all persons should submit themselves, and to which they should submit their children.

"Such an examination must include an inquiry into the family history, to learn the hereditary constitution; into the personal history, to learn all the previous diseases that have been passed through and the habits and vicissitudes of life; into all the conditions of life surrounding the individual; into the condition of the organs and the functions of the body; into the state of the secretions and fluids of the body by analyses and microscopical examinations; and so forth.

"The examination should be reported in writing; and, after due consideration, such advice must be given as a careful judgment may dictate, for the future conduct, pursuits, and habits of the patient, with a view to correcting any defects or tendency to defects in the organism. Advice must also be given as to the means of removing any vestiges of disease that have been detected, or if they are not removable, advice as to the best way of overcoming their influence or of averting their increase. To this must be added precautions to be adopted in certain contingencies which, according to the judgment of the case, appear probable.

"If such a plan as I have proposed were to be faithfully and conscientiously carried out by the present and rising generation of well-educated, studious medical men, I think no one can doubt, after a careful consideration of the subject, that immense benefit would be conferred upon the public."

One stands rather aghast to hear such downright common sense echoing along the corridors of time and rising above the constant tumultuous din and twaddle shouted into our ears from every variety of cult and quack flourishing in the rich pastures of our present wholesale, largely preventable morbidity.

A very large portion of the answer is already given to the constant complaint we are getting from numberless nonmedical writers regarding the "high cost of illness," and who, if the truth would out, are only emphasizing the high cost of our own stupidity and personal neglect.

When once this wise plan of periodic examinations is systematically followed by the family doctor we personally choose for this purpose, who comes to know our constitutions through his regular yearly appraisal of our physical state, the present burning question of the high cost of medical care for those of moderate means will be to a large extent settled.

The families who follow this sensible method of being thoroughly inventoried every year and having the book of health annually balanced will not be likely to get hopelessly behind in their health account or their bank account. Pursuing this plan fewer doctors will be needed in the future because fewer serious ailments of a chronic nature will exist; most pathologic conditions will either be nipped in the bud or prevented altogether. The saving, individually and generally, of doctors, nurses and hospital bills will be enormous.

When once the family doctor is assured of a regular income from the families he periodically examines it is fair to assume his charges

will not need to be great in cases of emergency among those over whose health interests he has constant supervision. The family budget as to the expense of sickness will grow materially less.

The plan of periodic health examination will sharpen the physician's sensibilities in the detection of all deviations from the perfectly normal state. His capability as a physician will rapidly increase to the advantage of the public that employs him. Before long fewer and fewer specialists will be needed.

If these ideas of maintaining good health appeal to the public it may have the comfort of knowing that the medical profession through special courses of study in this department of medical service is already preparing itself so to serve those who have the clarity of vision to take advantage of the opportunity.

It is indeed a mutual advantage that the clear heads of both the profession and society are not going to miss. To this end the County Medical Society of New York—to mention one instance only—is giving its most careful attention to putting this plan of medical service on a sure and scientific footing. The details of a thoroughly up to date periodic physical examination have been worked out and forms for recording prepared for the many conscientious and sincere physicians who have prepared themselves to meet this great public need just as fast as the general public itself wakes to the full appreciation of it.

The medical profession is on its way and ready to go more than half the distance, in order to stem the ever rising tide of serious ills that follows on the heels of personal indifference in the matter of health.

Through the periodic health examination as carried on by the family doctor the doorway to the cordial relationship of the past can once more be opened between the family and the physician. No such opportunity as this, since the rise of specialism and the overshadowing of the general medical adviser, has presented itself to the people at large. In this orderly plan of attention to health the family can once again realize that precious sense of security that comes from the knowledge that it can at any time call on the services of a capable and sympathetic personal adviser who fully understands the family circumstances, physical as well as financial, and on whose loyalty the family or the individual may confidently depend.

Strychnine Poisoning Brings Death to Many Infants

SUGAR coated pills and chocolate covered tablets used by many sufferers from constipation and left carelessly on the bathroom shelves spell danger for the small children in the home. These tablets, as a rule, contain strychnine, which in the prescribed doses is not harmful to adults; yet when a child is lured by the sweet taste of the coating, he eats several or even an entire bottle of 100 and he faces the fate of many other children who have died from strychnine poisoning.

It is astonishing to find so many deaths from strychnine poisoning in young children, says Dr. John Aikman in a recent article in *The Journal* of the American Medical Association, indicating that the cause, though perhaps not the commonest type of poisoning in children, is certainly the most important from the standpoint of fatality.

Strychnine is contained in tablets commonly taken for grip, in tonics and in the popular household cathartic remedies. Parents getting the tablets from the neighborhood druggist in bottles without warning labels are unaware of the danger lurking behind the door of the medicine chest. Children are attracted by the bright color and the sweet flavor, and not stopping to chew the sweets, they escape the bitters underneath and finish the bottle.

The interval it takes for the child's system to absorb the poison after it is in the stomach makes it increasingly difficult to diagnose the convulsions that follow. As a consequence, proper treatment is delayed and the child often dies while the cause of his illness is yet unknown. It is likely that many more children dying of convulsions than the records show have been poisoned by these home remedies.

Remedies should have warning labels, telling parents that they contain strychnine and should be kept away from children. As it is, the prescription is on the bottle in small type, and few persons take the time to notice the contents. Some authorities say that the strychnine is unnecessary in medicine taken for a cathartic. In Nevada the sale of remedies containing strychnine is forbidden by law.

Statistics from the Metropolitan Life Insurance Company show that in 273 deaths among children from poisoning during 1926, 1927 and 1928, the kind of poisoning was known in 241 deaths, of which 82 were due to strychnine poisoning. Forty-six of the 82 cases of strychnine poisoning were known to have been due to the accidental taking of cathartics. The majority of the deaths are among children in the second year of life.

The fatality in the United States is probably higher than in other countries, says Dr. Aikman, because so many of the remedies commonly used in this country contain strychnine.

The child between the ages of 2 and 4 should have a daily nap of from one to two hours in his own bed.

Building Mental Health

By

Irving J. Sands

THE building of mental health should commence before birth. Every child is entitled to the privilege of having normal, healthy parents. Persons who are suffering from syphilis, deaf-mutism, mental deficiency and other hereditary diseases should be discouraged from marrying or at least should consult a physician before doing so.

The woman about to become a mother should receive all the care and attention that medical science offers, in order that the baby may have a healthy constitution. Childbirth should be managed by a competent physician, so that the delicate brain of the child will not be injured.

Infancy and childhood are the golden periods for the laying of the foundations of normal mental health. In these periods the pattern of adult behavior is formed.

Many mental diseases, as well as many types of delinquency and incorrigibility of later and adult life, are due to improper character and behavior building during infancy and childhood. It is imperative that the child receive proper training in his developmental period in order to insure healthy mental life.

The brains of young children are pliable, and healthful habits may be readily acquired. Children should be encouraged to have regular sleeping hours and to sleep in well ventilated rooms. Between the ages of 2 and 4 they should have a daily nap of one or two hours. A child should have his own comfortable clean bed and whenever possible his own room. He should go to bed happy and contented. At no time should he sleep with his parent, nor should he be rocked to sleep.

Every youngster needs his own toothbrush and towel, and he should have a daily bath. Meals should be served at regular hours, with meal time made a happy occasion. No one should go to the table in a tired or angry mood. The child who is a poor eater is either overfatigued, has some physical disease, or has been improperly trained. If the child persistently refuses to take food properly, a physician should be consulted. Every youngster should be taught to attend to his daily toilet needs.

Young children are great mimics. They imitate everybody, following both good and bad examples set by parents or others with whom they come in contact. Indiscreet words or actions in front of the child are readily copied. Respect of one parent for another in both actions and speech will be imitated by the youngster. Bad habits may be readily acquired from nursemaids and playmates, and parents should be careful in their choice of both. The so-called nervous child is usually the product of an unhappy and unstable home environment.

Children like to receive the approval of their parents. They crave attention. A kindly act on the part of the child should be commended. But no child should be coddled, and many a parent is responsible for failures in the life of the child by having satisfied every whim and fancy during his formative period.

Every youngster should have a bath each day.

On the other hand, one must not be too critical of children. When asking a child to do some task, it should be in a pleasant, calm, firm tone. Children as a rule obey considerate parents. Many parents do not even wait to gain the child's attention before asking him to do something. They make unreasonable demands on the children, driving them into panicky states. In order to escape punishment, children may cheat and lie. No favoritism should be shown, and the parent should not

hesitate to apologize for mistreating a child. The youngster senses a wrong readily, and the feeling of resentment that the wrong may arouse in the child may be responsible for incorrigibility later in life.

Children are very suggestible; therefore, good as well as bad traits may be inculcated in the child. One should never tell exciting stories to children at night, as it may disturb their sleep. Parents need to be calm in their actions when in the presence of children, and they should not speak of illness or of troubles in their presence.

The community is wise that supplies supervised playgrounds for its children.

Children are playful. Group play is particularly beneficial in that it encourages respect for others and develops a spirit of fair play. The community that supplies playgrounds for its youngsters is wise, for much of the delinquency and incorrigibility of later life can be avoided if children are given the opportunity for group play in the open under a competent supervisor. Money spent for jails and penitentiaries could be more opportunely used in building playgrounds. In congested communities provision must be made for playgrounds, as children have no other means of spending their excessive energy. Surely the crowded streets are not safe places for them.

The brain of the child should receive careful protection. It is appalling how many children receive fractured skulls and injured brains as a result of automobile accidents. They are crippled for the rest of their lives, for no one can expect a brain to function properly if it has been injured in childhood. Normal mental health depends on normal functioning of the healthy brain.

Physical disease such as meningitis, mumps, measles, whooping cough and diphtheria should receive careful treatment from a physician, as these diseases are likely to leave ineradicable impressions on the brain of the growing child.

When the child reaches adolescence, or the period from 12 to 14 years of age, he must receive intelligent, sympathetic attention from the parents. The youngster is moody at this period of development. Every girl should be taught of the approaching change in her development. The phenomenon that is characteristic of this period of life should be told to the girl by the mother in a sensible and reassuring manner. The father can give the son the facts that have not yet been explained to him about sex life. Parenthood is the greatest privilege and the most important duty that may fall to the lot of any human being. Every youngster needs to feel that his parent is his best friend. If parents are always ready to listen to their troubles and problems, the children will first turn to them for help and advice in time of need or danger.

Young people need to be encouraged to assume a frank and open attitude toward all of life's problems. They should be encouraged to air their complaints and not to brood over them, and to face realities of life frankly and energetically and not to shirk from duty no matter how unpleasant it may seem.

Vocational guidance also contributes to mental health. Every young man should be taught some vocation or trade by which he may become self-supporting. Idleness and want of a gainful occupation breed delinquency and criminality. The community that provides free education and free trade schools is the gainer in the long run, as it will have to build fewer jails, penitentiaries and correctional institutions.

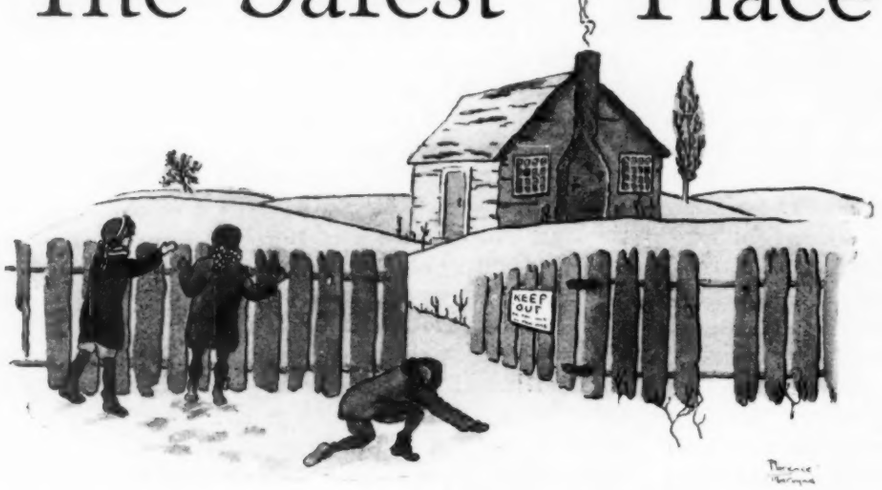
Next to being born, marriage is probably the most important event in life. When contracted for any reason other than love, it is bound to lead to unhappiness. When wealth and title are the sole objectives in marriage, they are almost always followed by misery and mental distress. Children are the greatest and the most healthy source of happiness and contentment for married people.

The head of the family should always provide for emergencies so that those dependent on him will not suffer through his incapacity or untimely death. A savings account, life, health and accident insurance, and affiliations with benevolent associations contribute materially to the peace of mind and mental health of the head of the family.

The head of the family should be financially prepared for emergencies.

I cannot emphasize too strongly the importance of having a family physician to whom to turn in time of sickness, whether it is physical or mental. If this habit were widely cultivated, it would save the happiness and lives of many persons, for quacks, charlatans and faddists prey on the physically and mentally sick. The family physician is best qualified to treat sickness. If he needs expert advice, he is in the best position to know where to find it.

The Safest Place in Town



By W. W. Bauer

The old pest-house was a shack out in the field beyond the city limits.

FOUR men were seated around a table in the hotel dining room, looking out over the lake and enjoying a leisurely luncheon. The conversation had veered from business to politics and civic affairs.

"It is interesting," the lawyer remarked, "how time will change attitudes of the public toward certain things. Yesterday I had lunch in a place that you could not have hired me even to enter ten years ago."

The health officer gave him a quick glance and busied himself with his salad, saying nothing.

"Where was that?" inquired the alderman.

"Up in your ward," the lawyer replied with a slight smile and a wink at the health officer.

"Well, out with it!" exclaimed the merchant.

"Perhaps you'd better not," the health officer put in, with a grin, "they may get right up and refuse to eat with you."

"I had lunch yesterday," the lawyer answered slowly, "at the—pest-house."

The health officer laid down his fork and glared with exaggerated hostility at the speaker, while the other two laughed.

"You couldn't get me to eat there!" the merchant exclaimed.

The alderman and the health officer looked at each other and smiled, and the lawyer replied, "We had a mighty good lunch."

"You'd better square yourself for that 'pest-house' break, or I won't invite you again."

"What do you mean by 'break'?" the merchant demanded. "Isn't it a pest-house?"

"The day of the pest-house," replied the doctor, "is over. And any one," he glared again with mock ferocity at the attorney, "any one who calls a hospital by that name is fifty years out of date."

"What do you call them?" the merchant challenged him.

"Isolation, or contagious disease, hospitals."

"A rose by any other name . . ." the merchant began.

"Yes, and a garbage dump by any other name would smell as strong," the health officer cut him short, "but there's as much difference between our isolation hospital of today and those of fifty years ago, as between the rose and the garbage dump."

"I can remember," the lawyer said, "when I was a boy, they had the old pest-house out in a field, way beyond the city limits. It was nothing but a shack—no gas lights (we didn't have electricity everywhere in those days), no plumbing—"

"And we got a licking if the folks found out that we had been within half a mile of it." The alderman chuckled at the remembrance.

"Yes," the doctor added, "and about all they had out there was smallpox. But that wasn't the

"We built a good-looking hospital, and property values around it advanced."

worst of it. Everybody was so afraid of the place that you couldn't even hire nurses to give the patients decent care. You had to leave 'em to sink or swim."

"How do you know?" the merchant challenged. "You weren't brought up here."

"Wouldn't need to be," was the ready response. "Those places were all alike. We had one in our town. And you couldn't sell a piece of property anywhere near it."

"They tried to build one of those—a—hospitals," the merchant interposed, catching himself on the verge of the word which had so offended the physician, "near my father's home when I was a boy. The property owners near by flocked to the council meeting in a body and killed the proposition."

The alderman chuckled again and leaned forward across the table, speaking quickly and emphatically, with decisive gestures that seriously endangered the successful clearing away of the soup dishes.

"Let me tell you fellows something. You don't have to go back a century to when Bill here," he jerked a thumb toward the merchant,

"The spectacle of you cooking a steak," said the doctor, "would be something like the average mother practicing the nursing technic demanded during contagion."

"was a boy, to find property owners doing that very thing. You know that I've been in the council twenty years—"

"These politicians have nine lives, just like cats," the lawyer remarked solemnly, his gaze intent on the rolling waves outside the window. The other paid him no heed.

"—when our hospital was built, we chose the site, and it was in my ward, right where the hospital stands today. Everybody within five or six blocks rose up to oppose the choice. They nearly ran me ragged. They called me up, they came to my home, they stopped me on the street. They had a mass meeting. About the only thing they didn't do was burn me in effigy. And they came to the council meeting. Boy, didn't they come! Over a hundred strong, and with two lawyers. Lawyers," he added without a smile, "have nine lives, just like cats."

"It looks as if they hadn't employed enough lawyers," the attorney remarked, "judging from where the hospital stands today."

"Not at all," the councilman rejoined, with a wink to the other two, "the mistake they made was in employing any. But all this joking aside, they were all wrong."

"I can't say I blame them," the merchant said.

"Well, we knew we were right, and we fought 'em. The mayor and the rest of the council stood by me, and we licked 'em, lawyers and all," he finished with a malicious grin at the attorney, who responded with a good-humored smile.

Arguments were a part of the relish that went with the weekly luncheons these four good friends never missed when they could help it.

Property Valuations Increase

"And after that," the lawyer added, "Jim was retired from circulation as a city father for two years." He shook his head sadly.

"You know as well as I do," the official retorted, "that I've been in the council twenty years running, and no retirement—yet. That was ten years ago. Today, look at that neighborhood. We had a wonderful site on the edge of a bluff with a beautiful view over the city and the river valley. We built a good-looking hospital. We landscaped the grounds and kept them looking trim and well cared for. And what happened? Just what you would expect. The plant was a credit to the neighborhood. People bought and built right up to the edge of the city property on both sides and across the street. Those places are not for sale today. And the people who own them are cheerfully paying taxes on increased valuations."

"In a residential section, too," the doctor added, and the alderman nodded agreement. For a little they busied themselves with their food, then the merchant returned to the attack. It was plain he was not convinced.

"Just the same," he said, "you couldn't get me to go in that place, much less have a meal there."

"And why not?" the health officer asked him. "I transact most of my business there—you know the place is under my charge—over the luncheon table. Saves my time and the head nurse's, and keeps the cook on the jump, because she never knows when I'm going to drop in. Besides it keeps me well acquainted with the staff."

"That's all very well," the merchant returned, "but that's your business, and doctors seem to have more than nine lives."

"They need them, in order to live long enough to bring some of you birds up to date and out of your ignorance," the physician retorted.

"If you want to take those chances," said the merchant with emphasis, "it's all right with me. But I'll take my meals in a nice—"

"—quick and dirty lunch, as I saw you doing yesterday!" the doctor snapped him up triumphantly. "And I'll take mine in a nice clean place that I know all about, such as a contagious disease hospital."

"I felt the same way Bill does, until yesterday," the lawyer remarked; "in fact, he had to drag me out there to convince me, didn't you, Tom?"

"I'll say I did," the doctor answered, "and I caught you polishing the silverware on your silk handkerchief."

"That," said the lawyer calmly, "is an unscrupulous piece of medical propaganda, without a shred of truth. But go on, tell him about it, only raise your voice above the music of Jim's fork."

"The isolation hospital," said the doctor slowly, "is the safest place in town as far as contagious disease is concerned."

"How do you get that way?" Bill the merchant snorted.

"If you have an enemy, do you want to know where he is?"

"Naturally."

"And what he's up to?"

"Sure."

"And everything else about him?"

"Yes."

"And how to protect yourself against him?"

"Right."

"In the isolation hospital you have all those advantages. As you and I go about, what protection have we?" He glanced over his shoulder, and lowered his voice. "This waitress, for instance. How do we know that last week she may not have had a sore throat which nobody recognized as scarlet fever?"

"Isn't that what your department is for?" the merchant asked.

Public Has Little Protection

"Certainly. But we're only human. Things escape us, or are wilfully concealed from us. Suppose she had a sore throat; she may not have known what it might signify."

"Her doctor should."

"Perhaps she didn't consult one. Perhaps she gargled with salt water, or got a bottle of Hackem's Whoop Balsam from the druggist, or wrapped the throat in an old sock, and got well in a short time. Mild cases of scarlet fever are like that."

"You're a cheerful cuss," the lawyer interposed, with a sharp look at the merchant and a wink at the alderman.

"And," the doctor finished, "perhaps she had her finger in her mouth a little while before she stuck it in your soup, where I saw it a few minutes ago."

"That," said the merchant severely, "is another unscrupulous—whatever Frank called it."

The doctor laughed. "The point is, that at the hospital we know what is wrong with these patients, and we know how to protect ourselves against getting the infection. That's why it's the safest place as far as contagious diseases are concerned."

"Tell him how that protection is accomplished —I had no idea about that until I saw it." The lawyer spoke with the enthusiasm of a new convert.

Nursing Technic for Contagious Diseases

"Simple enough," the physician replied. "It's a matter of cleanliness applied at the right point all the time, with never a slip. Gowns to cover the clothing, and keep that clean. These are removed when leaving the sickroom. A turban over the hair. Rubber gloves on the most contagious cases, like smallpox. Washing the hands thoroughly, the last thing after touching anything pertaining to the patient. And a mask to cover the nose and mouth."

"Why the mask?" the lawyer asked.

"Because most contagious diseases enter by the nose or mouth, with the breath or the food."

"A sort of air filter?" the alderman queried.

"Not exactly. More a shield against unguarded coughs on the part of the patient. And a reminder to keep one's own hands away from the nose and mouth."

"Suppose the nurses forget?" the merchant asked.

"They don't forget!" The doctor was emphatic.

"Everybody forgets—sometimes." The merchant's rejoinder was equally decisive.

"Well, all right," the doctor agreed, "but we have reduced that likelihood to the minimum, by rigid training. That technic is so ingrained into them that they practice it as naturally as Babe Ruth swings a baseball bat."

"Well," the merchant called Bill responded, reluctantly, "maybe you're right. Of course there wouldn't be many of us who'd get an invitation for lunch out there anyway. What I've always wondered at is how they can mix up all kinds of contagious diseases in such a place without getting them scrambled. One hears—"

"A-wah!" the doctor exclaimed in mock horror, "one hears! From old lady G. Ossip Report, killer of reputations. One hears—my gaw-sh!"

"Well," the lawyer said, "one surely does."

"Once in a long time," the doctor admitted, "as I have acknowledged, the human element goes haywire, just as it does with locomotive engineers, airplane pilots or any other human beings. But we don't abolish trains and airships for that reason. The chances of getting measles

and some other disease—name your own combinations—is definitely less in a well run isolation hospital than any other place I can think of. Why, contagious cases among the nurses on the job there are so rare that we are shocked when one turns up!"

"Would you send one of your children there?" the merchant challenged.

"I not only would—I have," the doctor responded without an instant's hesitation. "They got better care than they would get at home, to say nothing of saving us the inconvenience and expense of a quarantine, and their mother the loss of sleep and general wear and tear of caring for them."

When they get well enough to be up, they have other children to play with and plenty of toys and books.

"How did the kids like it?" asked the lawyer, with the air of one creating an opening for further discussion, and added, "and their mother, not seeing them?"

Child Happier than in Home Quarantine

"After the first day, when everything was strange, they liked it," answered the health officer; "they had other children to talk to, and when they got well enough to be up, to play with them. They had toys and books. They couldn't have had as good a time in a home quarantine, without playmates."

"I saw that myself," the lawyer agreed.

"As for the mother," added the doctor, "in my judgment, a child should learn early that occasional separation from the mother is a good thing—and so should the mother. We get occasional emotional mothers who are sure their darling will die if separated from them. They are quite shocked to see the same darling cheerfully planning devilment against the head nurse, with the rest of the gang, when she comes to visit." He laughed.

"We made up a bunch of stockings for the kids out there one Christmas," the merchant began, "and I felt sorry for them all alone out there on a holiday."

"Well, of course," the alderman interposed, "no one would want to be away from home at that season. But don't kid yourself about their being alone. They have a pretty good time. I've been one of a bunch of the neighbors up there who visit the kids every Christmas—they have a tree for each ward, and all kinds of nuts and fruits and candy, and toys—"

"That's twice you fellows have mentioned visiting them," the merchant interrupted; "how could you do that?"

"The hospital is built for it," the alderman replied. "There's a special glass corridor for visiting—the children are inside, the visitors outside. You can talk to them, if you don't mind shouting a little, and see them, and still you are perfectly safe."

"Can their parents see them regularly?" The merchant was beginning to be more interested and less argumentative, and the doctor and the councilman exchanged occasional amused glances.

"Sure," the doctor answered; "there are regular visiting hours, just as at any other hospital."

"I seem to be getting some new slants on this business," the merchant remarked.

"You're not in a class by yourself"; the doctor smiled as he replied. "We get some strange reactions from otherwise intelligent people," he smiled again and bowed ironically toward the merchant, "when we suggest the hospital. Many are afraid that the children who go there with one disease will get another, or even several, while they are there—"

"That would seem to be a danger," the lawyer remarked.

"It's all in knowing how. The technic is simplicity itself. We have few such experiences in well run hospitals. But in the home—" he shrugged.

"If it's so simple, why can't the mother learn it?" asked the merchant.

"Do you know how to cook a steak?" the doctor demanded.

"Sure."

"But can you cook a steak?"

"I never had to."

"Right. That's just the point. You know the theory. But the spectacle of you cooking a steak—for which I would gladly pay the admission price, if I didn't have to eat the results—would be something like the average mother practising our technic or me playing left field for the Cubs. It would be a mess!"

"The proof of the pudding," the alderman added when the doctor paused, "is that hospitals of this kind are being demanded more and more,

even by smaller communities, and where they exist, their facilities are in increasing demand. I understand that last year we had more than 50 per cent of all the scarlet fever patients in the city, at the hospital—right, Tom?"

The doctor nodded.

"Did you have any accidental mixed infections?" the lawyer asked.

"Cross-infections, we call them," the doctor explained, and added with a touch of pride, "We did not!"

"Couldn't that have been a lucky break?" The merchant was obviously seeking information now.

"Lucky breaks don't last for five years," was the physician's prompt response.

"That's a long time, right enough," the merchant agreed.

"We have the records to prove it," the doctor answered. "In the home, on the contrary, it is strange indeed, when there are several children, if a contagious disease doesn't get them all, one after the other."

Can Quit Building Separate Hospitals

"Everybody knows that," the merchant acknowledged.

"Tell me this, Tom," the lawyer asked. "A couple of weeks ago, we were talking about some of the contagious diseases, and you spoke of the winter increase and summer decline of most of them. Isn't the hospital rather a white elephant in the summer?"

"That is a disadvantage," the physician admitted, "but there seems to be a way out of that, too. Of course it doesn't pay to keep the organization intact and idle all summer, which we have to do. The answer to that is to quit building separate isolation hospitals, but to build contagious disease departments in the general hospitals."

Seeing Is Believing

"Wouldn't that be taking an awful chance?" the merchant objected.

"It is being done," the doctor answered, "and the results are good, besides being more economical than the separate isolation hospitals. I think it will be the coming thing."

"If it works, it certainly would be more business-like," the merchant replied. "But would it be safe to use the quarters for something else, when they weren't in use for contagious cases?"

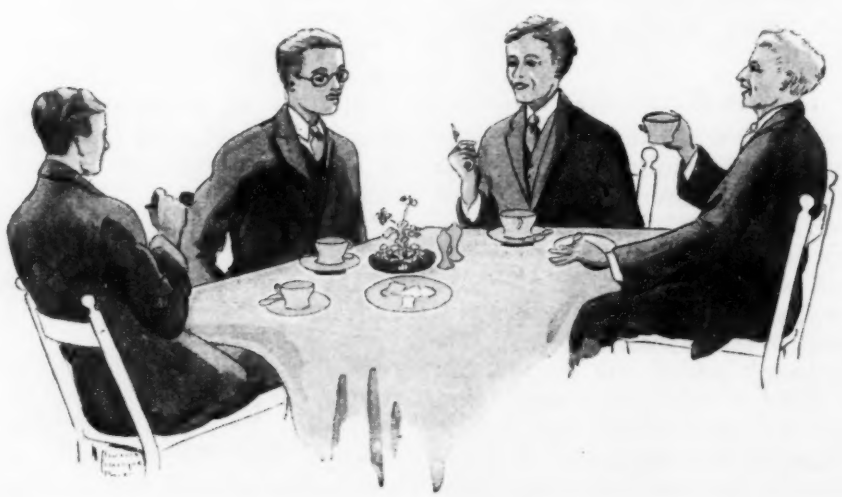
"Wouldn't there be danger to the patients who did not have contagious diseases?" The lawyer in his turn seemed hesitant about accepting this advanced theory.

"Why not?" the doctor replied. "As it is, we use the rooms out there for different diseases, in succession, and they don't get mixed. It's all in knowing how!" he repeated with emphasis.

The merchant looked at his watch. "Time to get back," he said, preparing to rise. "It's been interesting to hear all this, and I'm not sure—"

"Seeing is believing," the doctor interposed. "Come out with me next Tuesday, and look the place over."

"I'll try anything—" the merchant replied, as they filed out of the dining room, "—once!"



"We get some strange reactions from otherwise intelligent people," said the doctor, "when we suggest the contagious disease hospital for their children."

Substitutes for Sweets at Children's Parties

By Ruth Peck McLeod

"DOROTHY is invited to Mary Jane's party!" exclaims mother to father. "Now that will just finish her, for she has had indigestion for two days and after an afternoon of sweets she will simply have to go to bed."

Why should a children's party mean nothing but sweets? Can we not be ingenious enough to think of something else to serve? Just the other day I heard one mother say: "Well, I gave my children a big dose of milk of magnesia to counteract the effect of all those sweets they ate at Ray's birthday party."

Sweets are excellent in the diet if served at the proper time, not as an appetite killer or to the exclusion of all other foods. What normal child can put in his stomach a layer of fudge, a layer of ice cream, another of cake and still another of candy without the result being sad?

Most children's parties take place when the appetite is keenest, from 3 till 6 o'clock. Few of the returning guests are able to eat any supper. Why should mothers be willing to upset the health of a score of youngsters in order to observe the custom of serving sweets at parties?

The main reason that sugar is condemned is because it is misused. Sugar manufacturers need to write more on the abuse and misuse of sugar in the diet, for sugar is maligned because it is consumed indiscreetly.

Refreshments may be palatable and at the same time wholesome and suitable for little tots. There are plenty of good things that we can prepare besides sweets. There are other forms of sugars that we can serve besides concentrated sweet candy. Children enjoy fruit, and nothing is more healthful. We can serve a light lunch of sandwiches and fruit, or a salad and fruit, followed by a sweet dessert.

If the table is arranged attractively and if the sandwiches are cut in various shapes and served along with a colorful salad, the children will be delighted. Such foods cost no more than sweets and the after-effect will be much sweeter. Mothers need not dread parties when proper foods are offered. Children can be allowed to eat as much as they want if the food is of the right kind, and delicate children need not be denied the pleasure of partaking of all of the delicacies served.

My son often gives a party for the children of the neighborhood. We build a fire in the side yard and cook steak and bacon. We usually have apples, oranges and bananas, and I have some prepared vegetable ready. After the children have had a good meal, I bring out the marshmallows to roast.

On cold nights children enjoy an oyster soup supper. A pretty fruit salad and graham crackers may follow and then ice cream cones or sherbet.

All children like hot chocolate or cocoa. This may be served with sandwiches followed by a dessert of fruit mixture, consisting of apples, bananas, oranges and powdered sugar with a marshmallow or whipped cream on top.

Buttered popcorn is a good substitute for sweets. Apples and buttered popcorn are fine together.

Good cold chocolate milk drinks can be easily prepared for parties. Cookies filled with dates, raisins or figs may be served with the drink, and a few salted nuts won't hurt children more than 5 years old.

Fruit juices are excellent, if too much sugar is not used. Let orange juice predominate both for the sake of health and flavor. With this type of drink one may serve cheese, nut and lettuce sandwiches, and a cup custard with some ice cream or whipped cream on top.

Almost all children like fruit salads if they are not too tart and do not have an excess of dressing on them. Chicken or salmon salad with plenty of celery in it, a lettuce sandwich, and a bright colored gelatin dessert or ice cream will please youngsters of the school age.

A meal of creamed chicken is excellent. Small paper cups for the creamed chicken, peas and salted nuts are appreciated by young guests, as are doilies and fancy containers. To save dish washing, the whole meal may be served on a paper plate; beautifully decorated plates with colored designs may be obtained if the party is to be elaborate. A menu of creamed chicken, mashed potatoes, pear and gelatin fruit salad and an ice is suitable if the hostess wants to serve a real meal.

Creamed sweetbreads or oysters or mushrooms may be used in combination with the chicken or by themselves. Hard cooked eggs are good extenders to make the creamed meat or oysters go farther.

Refreshments, of course, need not be so elaborate as some of those mentioned. The menu can be planned to suit the purse and the occasion. The main object is to eliminate the serving of sweets alone. A few sandwiches and a basket of fruit will cost less than several pounds of rich fudge, gallons of rich ice cream and expensive cakes.

Study this party proposition; often the peak of the sickness for the year seems to be in the holiday season when parties are most abundant and sweets are served most lavishly. We should be as sane in what we serve children at parties as we are in arranging their daily diet. There is no excuse for their pleasures being spoiled by the wrong kind of foods served at entertainments. No party is worth while if it must be followed by acidosis and other conditions aggravated by the ingestion of a large amount of sweets.

The dietitian's advice is as valuable for party refreshments as for the child's regular meals. Too many sweets, the excitement that goes with a party, and contact with germs from a large group of children are three reasons why sickness often follows entertaining.

At a City Hospital

Out of his tenement's relentless gloom
They take him to the operating room.
A sunbeam falls upon the shining floor,
Another on the glass knob of the door,
And now the whole place seems a flood of light.
Three nurses stand like angels all in white;
They smile and their sweet glances are for him.
And now a buzzing rises, muffled, dim,
An odor, as of some unearthly flower,
Gains over him a strange and stealthy power.
Now comes the doctor, vigorous and kind,
Yet tense as though some weight were on his mind.
The great man's thoughts are bent on him—a worm!
For him the surgeon's hands are deft and firm.
A lonely man, long jobless and unnerved,
He cannot grasp it: how has he deserved
This burst of light, these beings in a ring,
Spotless and strong, who treat him like a king?
The vapors thicken, fill the humming air.
How sweet, how sweet to feel these kind ones care!
The tired, sluggish heart is beating fast.
He breathes—then tries to breathe: oh, let this last!
And now he cannot breathe—but he must keep
This moment's sweetness. . . . And the rest is sleep.

MARGARET MUNSTERBERG.

Fig. 1.—Medallion issued by the French Society for the Protection of Infancy.

Child Welfare Medallions

By

A. LEVINSON

Fig. 1.—The other side of the medal that helped arouse the French to protect their infants.

INDIVIDUAL child welfare is as old as the first child whose care was the concern of his mother. Communal child welfare, however, is of comparatively recent origin. In ancient times infanticide was common even among nations whose state of civilization was far above the average. All through the Middle Ages and, in fact, as late as the middle of the nineteenth century the welfare of the child was considered of so little importance that babies died by the thousands and tens of thousands, victims of the most preventable conditions. In fact, a high infant mortality was looked on as a natural phenomenon.

Here and there, it is true, even in the Dark Ages, a voice would sometimes be heard trying to plead the cause of the child, but it passed unheeded. It was not until well into the nineteenth century that public opinion was aroused and that concerted action began to be taken, demanding for the child the right to live and grow under proper conditions.

Defenders of childhood arose in various countries of Europe. As a result of their constant and tireless efforts, societies were organized for the protection of the child, propaganda was disseminated advocating maternal nursing, asylums were founded for poor and illegitimate children, and legislation was enacted against the abuses of child labor in fields and factories.

Fig. 2.—Medallion issued by French republic to celebrate the passing of the famous "loi Roussel."

Fig. 3.—German medal issued during the World War to get funds for a children's charitable institution.

The history of the rise and development of the child welfare movement may be learned through books and articles in various magazines. A great deal of additional information reflecting the human element that permeated the movement can be gleaned from the medallions issued at various times.

A medallion, or a medal, as it is more popularly called, is defined as "a piece of metal commonly circular, with the head or effigy of a person struck upon it, or engraved with a figure, scene or allegorical group." Medallions were generally issued on some special occasion, like the celebration of a notable historical event, the founding of an important institution or society, or the achievement of some outstanding person.

One can often learn more facts of history from the data on a single medallion than from a dozen articles. Whole pages of events can be pieced together from a single date, face, figure, motto or a symbol on a medallion; they tell the tale quite as beautifully and more con-

cisely than does writing. This is especially true of the medallions on infant welfare which have

Fig. 4.—Medallion to a Swedish physician, one of the early advocates of child welfare.

found their way into the homes and hearts of those interested in the health and rearing of the helpless child. They record the aim and achievement of societies organized for the benefit of children and they register the deeds and humanity of the progressive thinkers who wrote and labored in behalf of the young.

Fig. 5.—Medallion in honor of the renowned French obstetrician, Pinard.

The medallion shown in figure 1 commemorates the organization of the Société Protectrice de L'Enfance (Society for the Protection of Infancy) which had its inception in France in 1865. The medallion portrays a mother holding one child in her arms and leading another by the hand. It bears the inscription "Alendis Parvulis" (For the protection of the little ones). This medallion served to bring before the public both the needs and accomplishments of this society, which investigated the condition of the children of the poor, helped to improve their home conditions, supplied them with milk, and, above all, saw to the passing of laws for the protection of young children.

Another medallion (fig. 2) shows a mother with one child at her breast, while she feeds another with a spoon. She is blowing the hot food in the spoon, a custom that is not obsolete among some mothers even today. This medallion was issued by the ministry of the interior of the French Republic to celebrate the passing of a law for the protection of the young. In order to understand the historic importance of this medallion in connection with the legislation affecting child welfare, it would be interesting to note the provisions of the law to which it refers:

The famous *loi Roussel*, which was passed in 1874, was for the protection of the infants of peasant women, who often neglected their own babies to nurse the infants of the rich. The law made it imperative for such women to obtain certificates from the local mayor to the effect that their own babies were seven months of age or older. The law also safeguarded the health of the infants of mothers who worked in the factories by insisting on government inspection and certification of all places in which children under 2 years old were farmed out.

This law is commonly held responsible for a reduction in infant mortality in France from 78 per cent to 15 per cent. One of the French writers asserts that this law established the principle that the welfare of the child takes precedence over all other considerations.

The promulgator of this humane law was Théophile Roussel (1816-1903), a French physician who was known as the friend of abandoned children. One of his admirers, on returning from a visit to Roussel's native village, spoke of it as a land in which there were no orphans, for those who had lost their parents had Father Roussel to take care of them. Garrison, in describing the personal magnetism and modesty of Roussel, relates the following: Once when an important jubilee was held to celebrate his achievements for the cause of infant welfare, Roussel said with charming simplicity: "It is the celebration of the society for the protection of infancy (and not mine)."

Roussel was also responsible for the passing of a law for the suppression of public drunkenness and for the organization of medical charity. "The ruling principle of his life," Garrison says, "was to translate charitable sentiment into enacted law."

Fig. 6.—Medallion honoring the first professor of pediatrics in the United States.

During the World War many societies in France and Germany issued iron or copper medallions for the purpose of obtaining added

funds for some charitable institution. The Red Cross often resorted to this means of raising funds for the care and welfare of the children of the men at the front. The inscription of the medallion shown in figure 3 makes its own plea: "Gedenket der Säuglinge und Kinder" (Remember the infants and children).

The medallion shown in figure 4 is that of one of the earliest advocates of child welfare, Nil Rosen von Rosenstein, a Swedish physician who lived between the years 1706 and 1773. Dr. von Rosenstein not only treated children for their ailments but he also taught disease prevention. In his treatise on diseases of children, which was published in Swedish in 1764, he raised his voice against many of the existing abuses of his day.

Dr. von Rosenstein stressed the importance of breast feeding. He urged mothers not to nurse their babies every time they cried. He advocated the need of keeping nursing bottles clean. He criticized the fallacy of attributing all ailments of childhood to teething. He opposed swaddling and violent rocking. Dr. von Rosenstein's treatise is so full of axioms that we are trying to enforce today that it could have been written in the twentieth century. The von Rosenstein medallion is from the John Crerar Library collection.

The medallion (fig. 5) issued in honor of the renowned French obstetrician Adolphus Pinard bears his portrait on one side and the figure of a mother cuddling her child on the other. Beneath the picture of Pinard, there is an inscription, "Le lait de la mère appartient à l'enfant" (The milk of the mother belongs to the child).

This medallion was issued by the Puericulture Society of France in recognition of the service of Professor Pinard in puericulture, or infant welfare. His great service consisted in advocating breast feeding for every child. It is strange that so simple a thought, as "mother's milk for mother's babe," was not understood by the people and it took many years of propaganda to popularize the idea.

Fig. 7.—Rousseau opposed wet-nursing.

From the collection of Dr. V. Robinson of New York comes the medallion struck in honor of Abraham Jacobi (1830-1919), the nestor of American medicine and the first professor of pediatrics in this country (fig. 6). Dr. Jacobi's contributions to child welfare were epoch-making. He directed propaganda for breast milk, insisting that cow's milk was never as good as mother's milk for the infant. He was instrumental in the passage of several laws in behalf of the child, and he organized societies for the protection of infants and children. Dr. Jacobi believed that the infant requires study from the first hour of his life and that the physical, intellectual and moral condition in which the child is brought up decides as to whether the world is to be more criminal or more righteous.

Fig. 8.—Both sides of a Victor Hugo medallion. Hugo was childhood's great good friend.

It is interesting to note among the champions of child welfare not only the names of physicians but those of philosophers, novelists, diplomats. Jean Jacques Rousseau and Victor Hugo of France, Robert Owen of England, President Roosevelt and President Hoover of the United States, are a few of the many whose names are intimately associated with the progress of the child welfare movement. President Roosevelt called a White House Conference in behalf of child welfare and President Hoover has been the chairman of the American Child Health Association for many years. We shall elaborate only on the two whose medallions are shown: Rousseau and Hugo.

In his introduction to "Emile," which was published in 1761, Rousseau (fig. 7) speaks of the dangers of swaddling and of mercenary wet-

nursing. He implores mothers to nurse their own infants. It is stated that as a result of the publication of "Emile" maternal nursing became so popular in France that some women carried it to the extent of nursing their babies even at the theater.

The name of Victor Hugo (fig. 8) is closely associated with the establishment of school lunches in France. He is also credited with being the originator of the expression "the right of the child."

Hugo introduced this famed expression in an address he delivered before the Assemblée Législative, on Jan. 15, 1850, in which he asserted that the right of the child was even more sacred than the right of the father. Truthfully has it been said that children never had a better friend than Victor Hugo.

There have been a great number of medallions struck in the interest of child welfare and in honor of the sponsors of the movement. It is hardly possible for one to know of all those in existence. In this article, I have limited myself to an explanation of a few of them, which are part of a larger collection of medallions on medical history in my possession. I have endeavored to show how these small pieces of metal illuminate important historical events in the development of the child welfare movement, and that, as such, they should be regarded not merely as ornamental bits of bronze or silver but as human documents of great significance.

Germany Takes Up Fight Against Quacks

AS MOST of the readers of HYGEIA know, the organized medical profession of the United States, the American Medical Association, has for nearly a quarter of a century maintained what is now called the Bureau of Investigation. This bureau investigates various nostrums, quack schemes and medical fads and frauds in general. It publishes the results of its investigations in weekly articles, pamphlets and books. In addition, the Bureau of Investigation has prepared some forty educational posters covering the same subject.

Following the American example, a German organization has been accomplishing some notable work in this field during the past few years. This organization is known as the German Society for Combating Quackery. It has done some admirable work in investigating and exposing fraudulent health schemes and practices. Here is reproduced in black and white a recent poster of that organization. The original poster is in four striking colors and, translated freely, it reads:

"The human body is the greatest work of art in the world.

"Do not entrust this work of art to a quack.

"During illness consult a reputable physician."

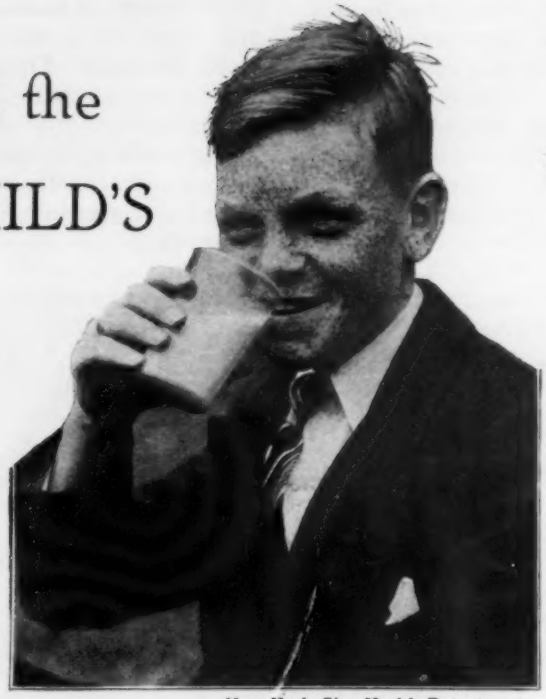
The poster also lists some of the aims of the Society: to teach hygiene; to combat superstition; to expose frauds and swindles; to eradicate quackery.

Quacks do not abound in Germany to quite the same extent as in the United States.

Conserving the SCHOOL CHILD'S TEETH

AS IT IS DONE IN PHILADELPHIA

By Ruth L. Frankel



New York City Health Department

One way of conserving a boy's teeth is to be sure that he drinks plenty of milk every day.

IN THIS age of preventive medicine, public health organizations are concerning themselves with all possible phases of health conservation. In Philadelphia, they are attacking neglected teeth, doing so by means of a completely equipped dental laboratory housed in a motor bus, which travels from one public school to another in an effort to educate the public to the care of the teeth.

After many years of tooth brush and tooth paste advertisements, and even after the concerted efforts of Amos and Andy, it comes as a shock to the person who brushes his teeth as regularly as he eats his dinner to learn that the vast majority of people everywhere are utterly negligent about teeth. A recent survey in the Philadelphia public schools showed that 98 per cent of the children suffered from tooth neglect. This was disclosed by Dr. John Detlefsen, executive director of the Philadelphia Mouth Hygiene Association, an organization of dentists, philanthropists, social workers and heads of dental schools. Dr. Detlefsen examined ten thousand children in the public schools, to find only 2 per cent with healthy, well cared for mouths.

There seems to be widespread ignorance of the need for keeping the teeth healthy. The Philadelphia Mouth Hygiene Association found an average of nine cavities per mouth in the children of the lower grades, and a general laxity and carelessness about dental health that showed public indifference. So the organization felt that something had to be done.

Here was a group of children growing up with mouths that were storing up trouble. At least half of these youngsters came from homes too poor or too lazy to bother even after they knew of the need for care. The very fact that three fourths of all the children had never had any dental attention showed that more than a mere reminder was required. To be sure one group—24 per cent of all—had had some care, but not enough to keep their mouths perfectly healthy, for they too disclosed decay and other ills.

The idea of a traveling bus was first suggested by Dr. Emerson Sausser, vice chairman of the Philadelphia Mouth Hygiene Association, and as a makeshift it is doing amazing things. Unfortunately, the funds at the disposal of the group are as yet totally inadequate to meet its real needs. The ultimate dream is a central dental infirmary, with branch clinics all over the city, and motor busses used merely to visit those who cannot reach the clinics. But that is still a dream, though one that promises some day to become reality and to make Philadelphia's dental care the pride of the country. In the meantime, the problems of education and transportation are being skilfully solved by the clinic on wheels, which carries the mountain effectively to Mohammed. Its only drawback is a limitation of size and time.

The staff of the dental bus includes five dentists, who work three at a time, and five dental hygienists. The latter are young women, graduates of the two-year course in dental nursing now given in dental schools. They do all the preliminary work. Before the bus visits a school, four of them go there and pave the way for the work to follow, educating parents and children to the need for healthy teeth.

These young women have been specially chosen for a special job. Not only do they know their work, but they are all young and attractive and have the type of personality that

makes friends with small children. Their task, on arriving at a school, is to examine mouths, clean teeth, and chart records of decay for the dentists. Frequently they give talks on mouth hygiene to parents, explaining the need for the work and urging them to give the necessary permission to put their children's teeth in order. No work is undertaken—not even mere examination—without written permission from the parents, and specially prepared blanks are sent home for this purpose. These blanks are of two types. One merely gives permission to examine the mouth and clean the teeth. The other signifies the parent's willingness to have the dentists in the bus make necessary repairs.

Bus Has an Inviting Interior

One week after the nurses have arrived at a school the bus drives up and parks in the school yard. Three of its staff of five dentists and the remaining nurse are in it. Group by group, the children are sent out. As there are three chairs, three children can be treated at once. The average child takes about a half hour, so that in the six hours of a school day, the dentists can generally manage to care for thirty-six children.

The bus itself is inviting. It is painted green and white, and has long, green, leather-covered seats along the sides to hold waiting patients. There are sterilizers and cupboards, powerful lights to use whenever the day is too dull for the sunshine pouring in through wide windows to be sufficient, running water, heat, and all the things found as standard equipment in the most up to date dental offices. In addition—and where is the dentist elsewhere who thus soothes his patients?—there is a radio. It stands at the back of the bus, and whenever a small patient is put into a chair, the nurse manipulates the radio until soft and pleasing music is found, to distract the sufferer and make the experience pleasant.

So successfully is this plan working that children rejoice when they have a chance to be treated. One tot of 5 in the kindergarten cried bitter tears because his mouth was in such splendid shape that there was no need for him to visit the bus. Another youngster, a little girl of 7, hung back and could not be calmed until she was actually inside the bus. There she found such a pleasant atmosphere and so many happy children that her tears dried at once, and afterward she begged to come again, and went away completely cured of any antipathy to visiting the dentist.

Only small children have so far been treated by this unique organization. It was obviously impossible to treat all the school children, though that is the ultimate ambition of the group. So the director of the association wisely decided to start with the little ones, in the kindergarten and first and second grades, so that they at least could build up permanently healthy mouths.

"The older a child is," he explains, "the harder it is to repair the damage. Caries (decay) is a disease that can never be cured, though its inroads can be arrested. By the time children reach the early teens, if their mouths have been neglected, it is almost too late. After a certain point the only thing possible is to remove the tooth. But with the small child, if the mouth is put into good order and the child is taught to keep it so, a great deal of suffering can be prevented.

Teeth Are Often Foci of Infection

"People must learn," he continued, "not to wait until a tooth hurts to go to the dentist. Often, by that time, it is too late to save the tooth. If they would only visit their dentist regularly and take care of the small defects before they hurt, they'd save themselves an untold amount of unhappiness."

Such far-fetched ailments as rheumatism, indigestion, neuritis and many other disorders of adult life often have their beginnings in neglected teeth. While no one can positively insure himself against illness, a truly healthy mouth, daily cared for by tooth brush and mouth wash and frequently inspected by the

The green and white bus parks in the school yard and children are sent out to it in groups of three.

Quaker Photo Service

dentist, will repel many germs and be undoubtedly one means of keeping fit.

Many parents, unaware of the importance of such care, neglect the child's mouth, especially before the permanent teeth are in. This means that often the first teeth decay without being touched, so that the permanent tooth underneath starts out at a disadvantage in an unhealthy mouth. This can easily be avoided.

Quaker Photo Service

The bus has all the standard equipment of the most up to date dental office. In addition there is a radio to distract the sufferer's attention.

Children with frequent gum boils, with pulps exposed, with crooked, misshapen jaws, should have dental attention. About one fourth of the school children not only had decayed teeth, but also misshapen jaws and teeth out of place. Unfortunately, the bus is no place in which to give orthodontic treatment, as this jaw-straightening is called. This phase of prevention must wait for the establishment of the permanent clinic, though meanwhile, aside from esthetic reasons, many children are suffering from malnutrition and other ills resulting from an improperly shaped jaw that does not permit proper chewing of food.

As the schools are open only five days a week and it takes a week or more to finish the work at each school, the bus is constantly in demand. Besides caring for children of public and parochial schools through the week, on Saturdays and school holidays it visits day nurseries, settlement houses, homes and orphanages, doing its best to carry the dentist to those who need him. Because of the flexibility of its schedule, it has already managed to reach many who would otherwise be unable to get their mouths cared for. Ultimately, when the dream of a central infirmary becomes a reality, the bus will still be used to travel around to the old, the bedridden, the crippled and the very young, who find any journey away from home a hardship.

There is something singularly unique and altrustic about this bus. In the first place it is backed by an organization comprising many dentists. Although it is true that there are not nearly enough dentists in Philadelphia to care for all the people who should be looked after, there is still something quixotic in donating funds to provide competition for oneself.

Another notable thing is that this bus is designed primarily to reach the children. Most dentists are concerned chiefly with adults. The larger part of their work deals with filling decayed teeth in adult mouths and extracting those that have gone too far to be saved. The field of preventive work in healthy mouths is as yet hardly scratched. Only the progressive, well informed parent takes the trouble to drag tiny children twice a year or oftener to have their teeth inspected. Of course, if the teeth ache, they usually get attention. But when they don't, the average parent doesn't bother.

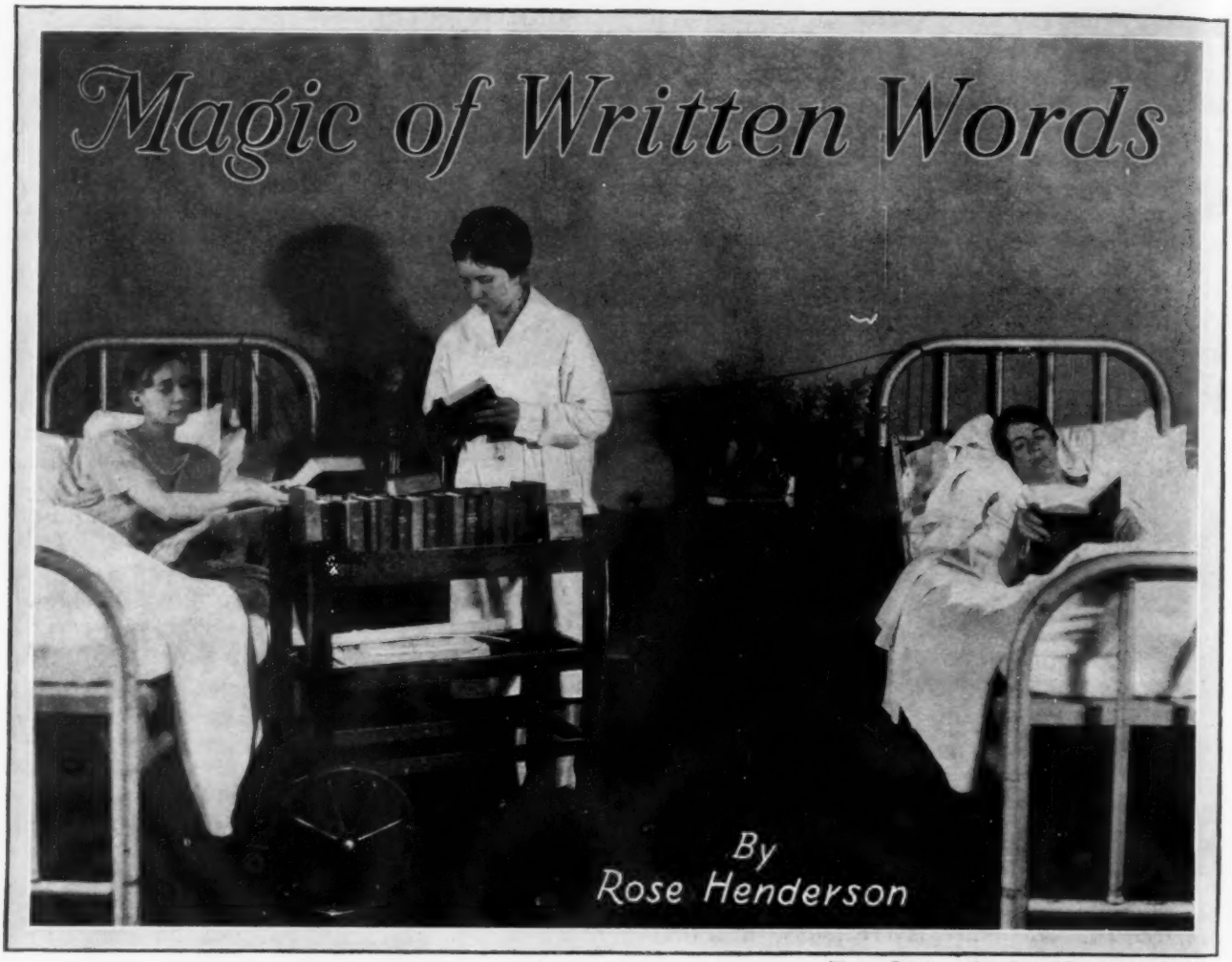
The reason for the indifference to tooth health, until recent years, is rather interesting. Public health work is a phase of preventive medicine, and years ago medicine and dentistry parted company. Nearly a century ago, a group of dentists attempted to have dentistry made a branch of medicine. But the physicians would have none of them, and each went his own way. It is only during the past quarter of a century, when prevention has been everywhere stressed, that the proper hygiene of the mouth has come into the limelight.

On the back of the slips the school children are given to take home, notifying their parents of decayed teeth, is a copy of resolutions already adopted by dental societies in eighteen states and drawn up by the American Dental Association as a declaration of the new principles animating dentistry.

In these they sum up their case, stating the need for more work with children, and calling on all dentists to uphold the fundamentals of dental health, and to do everything possible to promote the practice of children's dentistry, particularly among children between the ages of 2 and 14, when tooth health, like other health, is being established for life.

And through their carrying out of these they demonstrate that the principle of brotherly love is still being practiced, especially in the city that bears its name.

Magic of Written Words



By Rose Henderson

Photos Courtesy American Library Association

Books as medicine are only beginning to be appreciated.

IN THE large and rather bare sunroom of a county hospital in the Middle West, a group of men in various stages of convalescence sit around a table reading papers, books and magazines. To the healthy visitor the sense of confinement is deeply depressing, but the patients seem happily absorbed. They have forgotten the narrow bedrooms from which they have hobbled, the weakness and pain and poverty of their lot. They are toiling through African jungles with gay young adventurers, galloping across the plains on a cow-puncher's pony, trailing a mountain stream in an Indian canoe or just mulling over neighborhood personals in a small town weekly. A few may be reading books on how to get well or how to make money.

Between the long rows of cots in the Veterans' Hospital in San Diego, an attendant wheels a truck-load of books, and the patients reach eagerly for some promising volume which will extend the close white walls, shut away the suggestive hospital smells and numb the ache of a crippled body.

Magic of written words! A medicine only beginning to be appreciated and applied consciously as a subtle and powerful remedy for human ills. When one considers the enormous influence of reading in the lives of most readers who are in good health and remembers the possibilities for diversion and encouragement that lie between the covers of a book, it seems strange that hospital libraries have not been more extensively used in an age when the potency of suggestion is recognized as never before.

It is, of course, no easy prescription, this selection of mental fare for minds that are often more or less abnormal through the loss of physical comfort and balance. In cases of marked mental disturbance and maladjustment the problem is especially difficult, though the rewards of effort may be great. Quite naturally, physicians have felt their own inadequacy before the delicate and complicated task, yet they must minister to minds diseased, realizing more and more the close relationship between physical and mental ills and the need for whole-

some mind control as insanity and other nervous disorders become increasingly prevalent in our high-tension modern existence. Library hospital service is now being utilized by progressive institutional heads and a new term, "bibliotherapy," has been added to medical vocabularies.

"Hospitals may no longer be the somber prison type," says an experienced physician, especially successful with nervous cases. "They must take on much of the character of the age in which we live, and more and more as time goes on they will have to adopt novel methods of diverting minds while wrecked bodies are being restored. Among the new things that have already made their way into our institutions are the occupational therapy departments, the radio, the hospital reader and the library. Probably the most important of these is the library, which should be bountifully supplied with the best type of reading material for patients." Other authorities share his beliefs.

Soothing stories put some little patients to sleep and make others forget their pain and their homesickness.

Louise Sweet, formerly assistant supervisor of hospital libraries for the United States Veterans' Bureau, observes that: "The foundation of bibliotherapy rests on the medically corroborated belief that 'pleasure is an acceleration of the processes that make for life and growth, and this is true of our most ethereal and intellectual delights; that faith, hope and love seem to expand every cell of the body, and that doubt, fear and hatred contract our tissues as if with poison—which they may physically be.'"

The foregoing quotation from Will Durant's "Mansions of Philosophy" suggests the beneficial effects of philosophical books on the patient who has to reconstruct his outlook after a nervous breakdown, though such a choice might irritate one who had not arrived at the stage of rational readjustment.

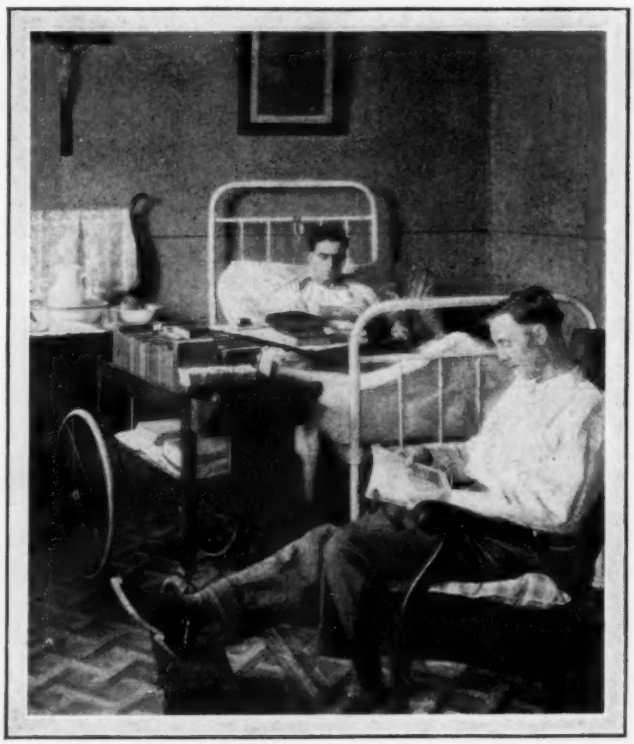
If the number of patients in the hospitals for mental and nervous diseases continues to increase at the present rate, by 1931 more than half a million persons will be inmates of such hospitals, according to *The Journal* of the American Medical Association. In the growing popularity of bibliotherapy and in the training of hospital librarians who are able to cooperate intelligently with nurses and doctors, a new type of ministration is being provided, which may help to restore these thousands of patients to a state of health. Taken as a preventive measure, the same treatment may help to ward off the breakdown that condemns the patient to an institution.

The hospital librarian must be a tactful, humane, versatile, sympathetic, enthusiastic person, able to adapt her selective principles to suit the patient's needs, able to apprehend diverse moods and personalities, able to stimulate and direct interest toward the most promising ends.

Says Rose A. O'Connor, hospital librarian of the Sioux City Public Library: "Psychologists tell us that we grow tired not so much from overwork as from lack of interest, and interest

keeps us alive as long as there is joy in accomplishing what one wishes to do. Hence, those of us who serve the sick should know our wares and have a lively interest in them, then aim to know human nature and feel its needs. The fundamental aim of hospital library service should be to send back into society men and women equipped to function socially, educationally and economically. Books can play an important part in the life of the convalescent. They can cheer or depress; they can create a keen interest in life and living; they can dispel melancholy; they can educate and entertain, and they can bring peace and comfort."

Dr. G. O. Ireland of the United States Veterans' Hospital at American Lake, Wash., points out that since the World War the importance of the hospital library has developed by leaps and bounds, and the Veterans' Bureau, recognizing the high quality of such service, insists on a technical examination and considerable experience for those who would hold the position of hospital librarian. Today several universities prepare students for such positions. It is suggested that the librarian should have also a knowledge of the mechanism of general symptomatology of the various psychoses and thus be prepared for many of the peculiarities that various patients display.



Books with a healing sense of the soil are particularly beneficial. Light romance pleases, but many patients who begin with the cheaper fiction develop a taste for Stevenson and Conrad.

"One cannot conceive of a man being the incumbent," says Dr. Ireland. "The position of librarian should be held by a woman."

Of the use of books as a form of treatment in a neuropsychiatric hospital, he declares, "The choice of books for such a library requires considerable care and a close inspection. A seemingly harmless volume may reveal the existence of sentiments innocuous to the average reader but possessing really alarming possibilities among the readers of an institution. Take, for instance, 'The House of Pride' by London, quite a harmless series of short stories, but 'Koolau the Leper' begins thus: 'Because we are sick they take away our liberty.' Of course this is tabu for obvious reasons. It might be dynamite to a paranoid." But Dr. Ireland finds that the librarian's department often provides the open sesame through which may be dissipated the clouds obstructing the vision of many patients.

We never allow drugs to be given indiscriminately. Then why books? On no account should haphazard browsing be permitted unless under close supervision. A paranoid, always a potential murderer, may obtain a book on poisons or on electricity, thus aggravating his symptoms and adding fuel to the flame of his delusional system. Do not give sad books to a mournful or depressed patient. A hazardous book to be used indiscriminately would be one on religion. Do not permit any book to be given by friends to a patient. The very book that the physician has ordered to be denied him is frequently sent by well-meaning friends.

Dr. Ireland believes in hospital reading not merely for diversion and recreation but as a reconstructive agent in the broadest sense. He also recommends reading aloud and story-telling in the wards. In his hospital he uses a regular prescription blank to be filled out by a patient's physician, suggesting to the librarian the type of books to be read and those that the patient may not have.

From the lists of popular books compiled by several hospital librarians it is apparent that travel volumes and novels in which the setting is an important element are especially welcome and helpful. Reading about strange and distant lands seems an excellent mental escape from hospital confinement. It produces an acceleration of the processes that make for life and growth, lifting the patient out of a poisonous state of negation and despair into one of constructive interest and hope.

Martin Johnson's "Safari," Mrs. Johnson's "Jungle Babies," Clyde's "Down the World's Most Dangerous River," and Byrd's "Skyward" are on one librarian's list of helpful and popular books. Wilder's "The Bridge of San Luis Rey" and "The Woman of Andros" are rather unexpectedly on half a dozen hospital lists of

best-liked fiction. Setting is emphasized in both of these novels and there is a decided atmosphere of detachment, a kind of large and soothing universality about them.

Objectivity of plot has a therapeutic value through its tendency to carry the reader along zestfully and to give him no time for morbid retrospection. Without obvious emphasis on optimistic themes, the choice of stories in which the leading characters are reasonably successful and happy seems a wise one. Avoidance of hospital literature and pathologic characters and illness is a common-sense precaution. Authors with an assured and reasoned philosophy that sees purpose and compensating satisfaction in life are held in therapeutic esteem, and doctrines of pessimism and futility are banned.

Mystery Stories and Light Fiction Appeal

Mystery stories appeal to large numbers of patients and because of their power to absorb and transport attention they are highly beneficial, though they have to be chosen with discretion in order to avoid too great excitement for the patient or too much violence and tragic suggestion.

A dash of comedy is something greatly to be desired and is usually found, with other wholesome ingredients, in the work of Mary Roberts Rinehart, Earl Derr Biggers and John Buchan. Greater literary excellence may be provided in books by such writers as Hugh Walpole, Eden Phillpotts and A. A. Milne and in the masterly sea tales of Conrad. Rolvaag's "Giants in the Earth," Willa Cather's "My Antonia" and other books with a healing sense of the soil are particularly beneficial. Light romance pleases and helps a great many sick people as do the sentimental western stories of Zane Grey and Harold Bell Wright. Many patients begin with the cheaper grade of fiction and develop a taste for Stevenson and Conrad.

Books that frankly attack a patient's weaknesses and ailments sometimes work marvelous cures. A nervous breakdown left a highly educated and cultured patient with a fear phobia. There was no definite thing to lay a finger upon but at the most unexpected moments the patient was overwhelmed with a mysterious dread that made his life unbearable. After much careful study of this case, the hospital librarian began reading to the patient from Dr. Oliver's book "Fear." The patient was immediately interested and read the book twice through. It played, as the patient himself stated, a most important rôle in his recovery. "Sleep," by Laird and Muller, aided a patient to overcome persistent insomnia. Mental patients who seemed hopelessly morose and self-centered have been brought back to normal through prescribed reading which they have been led gradually to undertake.

Patients May Give Plays

A valuable outgrowth of the hospital library service is the required reading courses for nurses that have been prepared at various institutions, leading to a development of good reading habits among students in schools for nursing. Another phase is the production of simple plays by the shut-ins under the supervision of the librarian. The making of costumes and settings is a delight to many patients who are not able to act or to assist with the directing. And all of them enjoy the performance.

A great impetus was given to hospital library service through the use of books for sick and wounded soldiers during the World War. And it is at veterans' and naval hospitals that one finds some of the most interesting developments and the most enthusiastic readers.

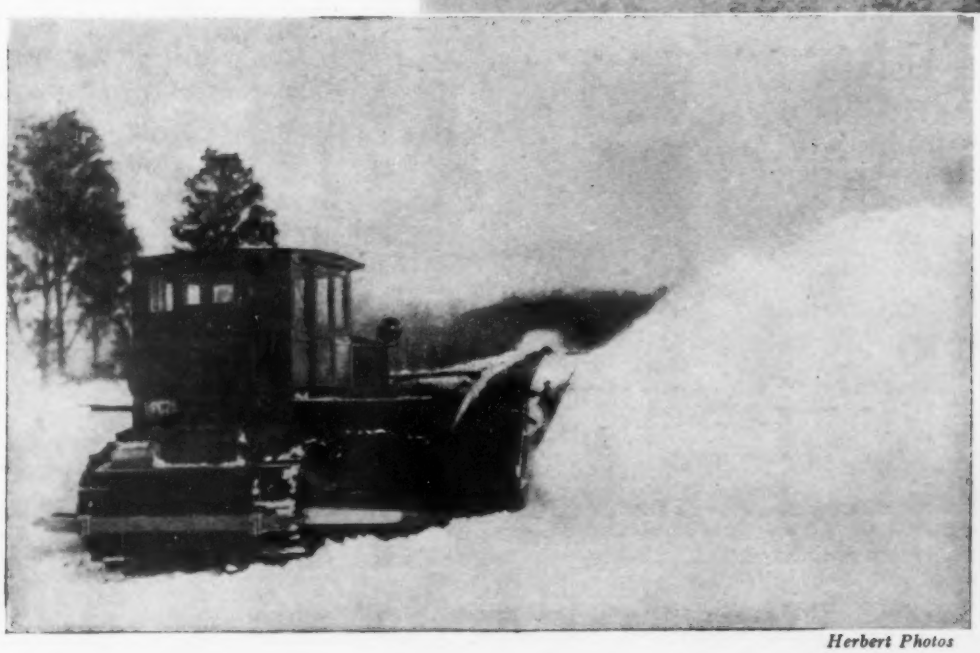
Pacific and Atlantic

SKIING WITHOUT SNOW

Skiing enthusiasts need not wait for snow if they have this new type of skis recently designed in Germany. Circular solid disks placed fore and aft enable one to use them on an ordinary street, it is said.

COME ON, RAGS! LET'S SKATE!

Doris E. Wright



Herbert Photos

SNOW PLOWS WERE CALLED INTO ACTION NEAR BUFFALO, N. Y., during a heavy snowfall in October.

Pacific and Atlantic

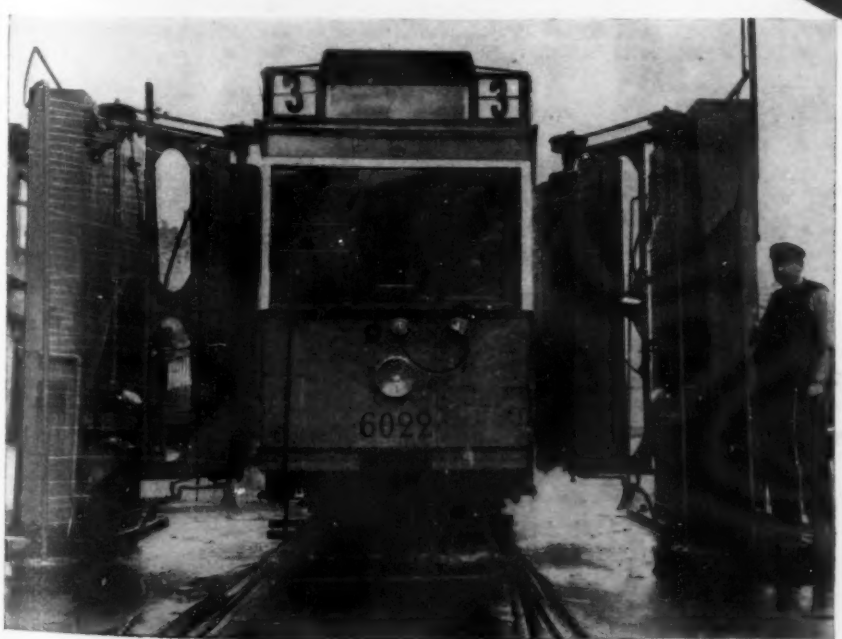
SMALLPOX INVADES CHAMPION TEAM

Consternation reigned and speedy vaccinations occurred at Northwestern University when the captain of the Big Ten championship football team suddenly developed smallpox. The gentleman having his arm scratched is Ernest Rentner, fullback. The three onlookers are the famous Hanley brothers: Pat, line coach; Lee, quarterback; Dick, head coach. There was no epidemic.

MOLARS IN DANGER

Camera study of a young man demonstrating his mastery over the rocky confections known as jaw breakers. His teeth may not stand such punishment indefinitely.

Herbert Photos



Pacific and Atlantic

SHOWER BATHS FOR TRAMCARS

Street cars in Berlin are washed by a machine that sprinkles and rubs them thoroughly in this fashion every morning before they start out for the day.

Herbert Photos

CHINESE PRAY TO CARVED IMAGES

Women of China pray at this altar for the blessings of the father and mother god on their sons. Modern influence has not yet uprooted the ancient preference for boys. The tiny figures at the front of the altar are boy baby dolls offered in tribute to the gods.

Herbert Photos

THE GOD OF SLEEP

The recumbent image at the right represents the Chinese god of perfect rest, to which many Chinese pray for surcease from trouble.

William Thompson

THE FORTUNE TELLER

The fortune teller by the roadside is a familiar figure in China. He often sells medicine as a side line.

Alice in Slumberland

I. The Little Walrus That Wouldn't Take a Bath

By

Nellie G. Herriman

Alice thought it the most interesting book a child could possibly read.

IT HAD rained nearly all afternoon. While the water came splashing from the gray clouds, Alice curled up in her chair by the window and read from her new book. It was about a little girl called Alice, like herself, and she liked to pretend that she was the girl in the book who had many adventures with the people of the story. It was surprising, but all the "people" were animals or queer persons made of playing-cards. The things they said and did were most surprising. There was a Rabbit who wore clothing such as Alice's father wore; a Hatter, who made hats for a living; a Dormouse, who could never keep awake, and oh, so many other interesting characters. Alice thought it the most interesting book a child could possibly read.

Her eyes were quite tired when it stopped raining, and Myrtle Ann, from the house on the corner, came to the door.

"Let's," said Myrtle Ann, "play at making mud pies."

"And we can make a sun oven and keep house just like real, grown-up cooks," said Alice. "Won't that be fun?"

So they borrowed three pans from the cook, and Myrtle Ann asked her mother if she might use the long-handled mixing spoon.

"Of course you may," she said, "if you will promise to be sure to return it when you are done playing."

They promised to bring it back to the kitchen and wash it with hot water and soap so that it would be as good as new. They found a nice splashy puddle beside the grape vine, where the sun shone down clear and warm and the sand was clean and white. No doubt they had a good time, for little girls nearly always do when the day is warm and the mud pies dry well.

When Myrtle Ann's mother came to tell her it was time to stop playing, she threw up her hands in surprise.

"My, my!" she exclaimed. "How dirty you are!"

And indeed they were. Their hands looked like black little paws, their faces were the color of the sky before a hard rain, and their frocks were covered with mud and dripping with water. Alice tried to scrape some of the mud from her face and hands before she went into the house, but I'm afraid it didn't do much good. Nurse looked quite shocked when she saw her.

"Dear, dear," she said. "You must have a bath before your supper."

Now Alice hated a bath, so she pushed out her lip and said, "No, I don't need a bath. I'll just wash my hands and face and put on a clean dress, and then I'll look as clean as ever. There is no need to trouble about a bath."

"Yes, you must have a bath," insisted Nurse, and she turned on the water in the bath tub and took clean towels and pink soap from the shelf. The water made a happy, gurgling noise as it ran into the tub, but Alice stood with one foot on top of the other and refused to listen. Nurse turned to Alice when the tub was nearly full, but at that moment there came a cry from across the hall.

"Oh, there! The baby is awake, and it's time for his supper. Can you take a bath by yourself just this one time?" asked Nurse. "I'll come back for you in half an hour."

Alice nodded her sulky head, and Nurse hurried to care for the baby. Alice walked slowly to the tub, without undressing, and put one

"Why, you are wearing your swimming suit," said Alice.

finger in the water. The water was really just right, but Alice said, "It's too hot," and turned on the cold water. A moment later she put her finger in again, but this time she said, "It's too cold," and turned on the warm water again. She wasted several minutes in this way, getting more tired every minute. Finally she thought she would rest for a few minutes before she had her bath and went to her little blue chair by the window.

"Isn't the water fine today?" said a voice.

Alice didn't look to see who had spoken. "It's too cold," she said.

"Oh, no, it's just right," said the voice.

"It's too hot," said Alice.

"You are very rude," said the voice.

Alice opened one eye. There stood the Rabbit, just as he looked in the pictures in the book, except that none of them showed him dressed as he now was. He wore a short black suit that fitted him tightly. On his round head was a red rubber cap, with holes for his long ears to go through.

"Why, you are wearing your swimming suit," said Alice.

"So are you," said the Rabbit.

Sure enough, instead of her muddy dress. Alice was wearing her blue bathing suit. This was, of course, surprising, but she was even more surprised to find that she and the Rabbit were swimming fast.

"I didn't know that rabbits liked to swim," she said.

"All proper people like to swim," the Rabbit said, making quite a splash.

"Rabbits are not people," said Alice, swimming as fast as she could.

"You are very rude," the Rabbit said. He waved a whisker at her, and three drops of water fell from it. "You are your kind of people but I'm the rabbits' kind of people."

Alice thought a long time. "Oh," said she. "Where are we going?"

"We are just going splashing," he answered, puffing and blowing.

"We have splashed enough; let's go home. I'm tired," said Alice.

The Rabbit disappeared, and Alice looked about but could see nothing but many green waves. She was beginning to cry when the Rabbit's head came into view beside her. He puffed out his cheeks and blew hard close to Alice's ear.

"You are very lazy," he puffed, and swam on ahead.

Alice knew nothing else to do, so she followed him, although she had a great deal of trouble keeping him in sight. She felt tired and cross and wanted badly to go home. When she called to the Rabbit he only waved, so she had to keep on swimming. A little fish nibbled at her toe. She frowned at him and he hurried away to tell his brothers that a new kind of fish, very cross and disagreeable, was swimming in their ocean. They all hurried to look at her, telling their neighbors whom they met on the way about the new kind of fish in their ocean. The neighbors wanted to see her, too, and there was quite a big crowd when they came to Alice. A

Alice was glad to scramble up on the Turtle's back. It was a nice seat, though rather slippery.

big sea-turtle, with moss on his back, had joined them. As soon as he saw Alice he said:

"Why, it's a little person-child! Dear me, she is very tired!" He paddled up close to Alice. "Crawl up on my back and I will give you a free ride. Where are you going?"

Alice was glad to scramble up on his back, which she found to be a nice seat, though rather slippery.

"I don't know where I am going," she panted. "I'm just following the Rabbit."

The Turtle paddled after the Rabbit and soon came up beside him.

"Where are you taking the person-child?"

"I am taking her to find some nice rocks to rest on," answered the Rabbit.

"I know where there are some fine ones," said the Turtle, whom Alice thought very kind. "Perhaps the Walrus family will be there; I know they will be glad to become acquainted with the person-child. We don't often have one of them as guests so far out in the ocean."

A little fish nibbled at Alice's toe.

After about an hour they came to some huge rocks that were surrounded by water. The Rabbit helped Alice to crawl from the Turtle's back to a large flat rock. She stood up and looked around. Sure enough, there were some large, dark animals, who bowed politely to one another, waved their flippers, and ate seaweed salad. The Turtle paddled up to the Walrus who seemed to be the most noble one, shook flippers with him and then pointed to Alice.

"Most Noble Walrus," he said, "I want to introduce the little person-child. She has come from far away."

The Most Noble Walrus bowed politely and waved a flipper at Alice. She didn't know what else to do, so she said,

"I am very glad to know you, Mr. Most Noble Walrus."

The Walrus stared at her hard. "Bless me," he cried, "the person-child has manners!"

All the Walrus family stared at her, so she bowed to them all.

"I am very glad to know you all," she said, and they bowed to her and waved their flippers, then ate some more seaweed salad.

"Would you enjoy some salad?" asked the Most Noble Walrus. "Salad is very good for people, especially person-people." He looked wise.

"Thank you, I don't believe I am hungry," said Alice, but the Rabbit took a pawful of the green salad.

"I never refuse green salad," he said, and the Walrus smiled at him.

While the Rabbit ate the salad, Alice noticed a little walrus swimming about among the others. He tried to crawl up on the rocks to rest but he slipped back into the water. He swam close to the walrus who was probably his mother, but she flapped a flipper at him and he went crying away. He grasped some seaweed that was floating about the rocks, but it slipped away just as he was ready to put it in his mouth.

"What is the matter with that baby walrus?" asked Alice. "And what makes him such a queer color? He is just the same color as the big turtle."

"You are very rude," said the Turtle. "My color is not queer."

"It is a very nice color for turtles," said Alice, sorry that she had hurt his feelings, for he had been most kind to her. "But it is a queer color for a baby walrus."

The Turtle seemed to feel better after she had said this and swam out to look more closely at the baby walrus. He came back puffing with surprise.

"Why, the baby walrus has moss on his skin, just as I have on my shell. That is queer, indeed!"

The Most Noble Walrus swallowed a mouthful of salad and said, "It is indeed strange, but that is a strange baby. You see, most walrus babies like to be clean, but he refuses to take a bath. He will not wash himself with whitecap suds or rub his skin with sand."

"Sand?" said Alice, wondering what use a walrus could make of sand.

"Sand is walrus soap," explained the Most Noble Walrus. "The baby walrus liked to go dirty, and nothing his mother could say or do would persuade him to take a bath. My family is clean, and they were badly shocked to find that one of the children could be so queer. Really, we do not like him at all, for we feel that he is a disgrace to the family."

"But what makes him that queer color?"

"Oh, that is sea-moss growing on his skin," explained the Most Noble Walrus, chewing his food slowly and well.

"But why does he slip off the rocks?"

"The moss on his flippers is so slippery that he cannot hold fast to things."

"Oh!"

"The worst of it is," continued the Most Noble Walrus, "that he cries nearly all the time. His mother is so ashamed of him that she does not like to gather salad for him, and he is so slippery that he cannot gather it for himself. So he is very, very hungry, but is too lazy to wash before he eats and so cannot eat."

"What will become of him?" Alice felt sorry for the poor little walrus who would not bathe.

"Oh, I think," said the Most Noble Walrus, looking very wise, as no doubt he was, "that he will soon become so hungry and ashamed that he will bathe properly, then we will all gather salad for him, we will be so proud and happy."

Alice saw him help himself to another bite of salad, when she felt some one take her arm. Opening her eyes, she saw that it was Nurse, and that she was back in her own little blue chair at home.

"Dear, dear," said Nurse. "Did you go to sleep in your muddy dress?"

"I'm afraid I did," said Alice. "But I will never be so careless again. I don't want to be like a baby walrus."

Nurse looked astonished, but of course she did not know about Alice's adventure.

The Kittens' Tea Party

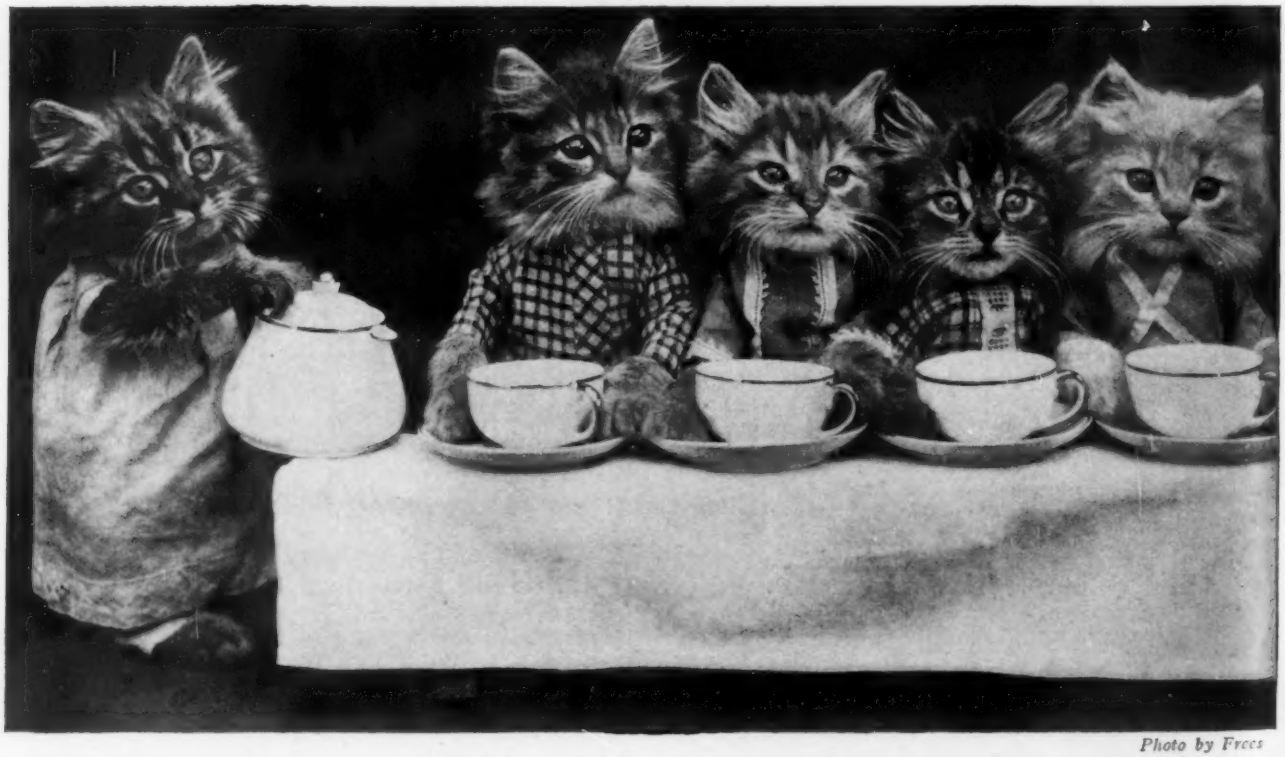


Photo by Frees

Young Mrs. Kathryn Canby Cat
Was always charming when she sat
Beside her table, pouring tea
To those in high society.

Her guests were sure to marvel at
Young Mrs. Kathryn Canby Cat,
Her choicest china, repartee,
And most delicious catnip tea.

But all the guests and Mrs. Cat
Were getting thin instead of fat.
They gave up tea and took to milk,
And now their coats are sleek as silk.

—MILDRED WHITCOMB.

HEALTH *and the* SCHOOL

Edited by J. Mace Andress, Ph.D., 67 Clyde Street, Newtonville, Mass.

Food Handlers in School Cafeterias

INSTRUCTION in health is desirable but training is better. The key to our modern school health program is not merely the acquisition of knowledge but the healthful behavior of boys and girls in the school and at home. The school is a community and as such it should, under skilful guidance, solve its health problems in a way that will involve the cooperation of both teachers and pupils.

The subject of foods offers great opportunities in training. Children, of course, should be trained in choosing the right foods for their lunches. There is another point, however, that is not given much consideration in most school cafeterias. Since disease may be spread by food handlers, those in authority should make sure that all those who handle the food are in good health and are not carriers. As is well known, a person may be in excellent health and yet be a carrier of typhoid fever, diphtheria or some other malady. The literature on health is filled with incidents showing how dangerous one person may be to a group. For example, there is a sudden outbreak of typhoid in a village community. The health officer with the keen scent of a Sherlock Holmes begins to study each case and finds that all those who first came down with the illness were at a certain church supper. He also finds that all those who were ill ate a particular kind of food. He is suspicious of those who handled the food, especially one woman who confesses that she had the disease about ten years ago. Further investigation shows that she is a carrier.

Food handlers in New York schools are carefully examined.

Typhoid Mary was one of the most conspicuous carriers of disease in the history of public health. She was employed as a cook in several families and institutions. Typhoid followed her wherever she went until finally to protect the general public the health authorities were obliged to detain her on an island in the New York harbor. This was necessary because she insisted on handling food.

Everybody who handles food in a school cafeteria should be in good health. Imagine the danger from one who is just coming down with an infectious cold and finds it necessary to cough and use a handkerchief freely. Such a helper will not only hand out food but also hand out germs as well.

The up to date health education department of the public schools of New York City is sensitive to methods of safeguarding the health of pupils who partake of lunch in school lunchrooms. Each food handler engaged in school lunchroom service is required to undergo a physical examination to exclude the presence of a communicable disease which may be transmitted to those who use the lunchrooms. On the passing of a satisfactory examination, the applicant is given a Food Handlers' Health Certificate. The following is a notice that is sent out to the principals of elementary, high and training schools throughout the city:

"Attention is called to the fact that all adult and student food handlers employed in the lunchrooms should possess Food Handlers' Health Certificates.

"Section 146 of the Sanitary Code of the Department of Health, City of New York, provides that no person employed in the preparation or serving of food shall be permitted to engage in such employment who fails to submit to examination to establish freedom from an infectious or venereal disease in a communicable form.

"Provision is made by the Department of Health wherein those who cannot afford the services of a private physician may be examined at occupational clinics under the auspices of the Department of Health."

Every one who handles food should be in good health.

Every school system should be as keenly interested in food handlers as the health education department of New York City. But even if the community does not have the advantages of a food handlers law certain things can be done. Only people without colds or symptoms of illness should be allowed to help in the cafeteria. The services of the school physician may be enlisted so that every food handler may be given a thorough physical examination, including the careful taking of a case history. All those who have had diseases like typhoid or diphtheria should have special consideration as possible carriers.

WHY ARE CHILDREN ABSENT FROM SCHOOL?

THE outstanding reason for children being absent from school is illness. Colds usually account for 50 per cent or more of the total school absence. This means that the school should treat colds as a real enemy and do all that it can to prevent this common malady.

The teacher who wishes to do effective health work should make a study of the health of every child. By so doing she will be able to report conditions to the school doctor and nurse and also to the parents and gain their cooperation in promoting the healthful living of her pupils. Principals will find that one way to quicken the teacher's interest in the health of her pupils is to ask her to make a study of school absences. This leads immediately to the study of the health of individual children.

The Massachusetts Tuberculosis League suggests as a health goal for 1930-1931 "less absence in the classroom due to contagious diseases, especially the common cold." The form below is suggested for keeping accurate absence records.

At the end of the month it might be desirable to talk over such a record with the children and possibly with the parents.

WHO IS ABSENT AND WHY?

NAME	DATES OF ABSENCE	TOTAL DAYS OF ABSENCE	CAUSE
1. Sam S.	Sept. 15-16	2	Toothache
2. Jane W.	Sept. 18, 19, 20	3	Cold
3. Jim W.	Sept. 19, 20	2	Cold
4. Helen K.	Sept. 27 (A.M.)	½	Sick stomach

The causes of absence, month by month, could be brought together in such a report as this:

ABSENCE REPORT BY MONTHS

Causes	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
1. Colds	5								
2. Toothache	2								
3. Sick stomach	½								
Total days absence	7½								

Such reports, according to a bulletin of the league, might lead profitably to the consideration of such questions as:

Why should children be absent?

Can these absences be prevented?

Can we do anything to prevent them?

How do our reports compare from month to month?

NEW HEALTH BOOKS AND TEACHERS' MATERIALS

IN "Teachers and Health Education,"[1] the American Child Health Association has reprinted four of its choice papers bearing on the teacher's work in health education. The titles of the papers and names of the authors are as follows:

"Keeping Pace with the Results of Experimental Research in the Social Sciences" by Dorothy Bird Nyswander, Ph.D., professor of psychology, University of Utah.

"Health Teaching in Elementary Schools" by Ida M. Haskins, director of health education of the public schools, Mansfield, Ohio.

"The Classroom Teacher and Health Education" by Anne L. Whitney, director of the division of health education, American Child Health Association, New York.

"Training Teachers in Health Education" by Alma Rood, professor of nursing education, George Peabody College for Teachers, Nashville, Tenn.

These papers present facts and points of view about health education that should be helpful to all teachers of health.

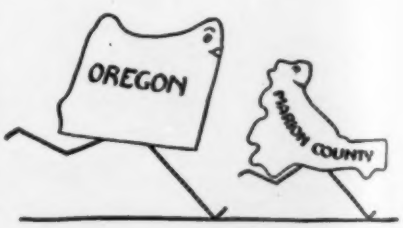
JOHN DEWEY stated an important problem in child guidance when he said that "Probably the greatest enemy to what is attainable in happiness in the life of human beings is the attitude of fear." The psychologist knows that it pervades everything of which we are conscious. This little bulletin[2] gives some suggestions as to how we may teach the child to face reality. There are some suggested references for reading.

OUT in Oregon there is a county that has become famous. Since 1919, Oregon, with the exception of one year, has been the healthiest state for babies. But Marion County gives its babies a better chance than the best state in the Union. It was not always so for there has been marked improvement. This rate of improvement in Marion County as measured by the falling death rate of babies is twice that of the United States and nearly twice that of Oregon itself. In the last five years it has also cut its maternal death rate in half so that it outranks both the state and nation. There has been a striking decrease also in the death rate of older children. This decrease has been surprisingly steady. The death rate from communicable disease in this county has been cut in two within the last five years. While the state death rate from smallpox has stood still the county rate has been cut exactly in half.

This remarkable achievement is not due to chance but to a progressive health campaign engineered by the Commonwealth Fund. This demonstration shows that within certain limits a community can determine its own death rate, or, to put it in another way, can determine the extent of the positive health of its citizens. The improvement in hygiene and sanitation has been marked throughout the county. As an illustration, the state inspectors in 1925 found that "70 per cent of the milk they tested was dirty or fairly dirty, 30 per cent fairly clean and none of it clean. In 1929, after less than two years' work by the county inspector, 6 per cent was fairly clean and 94 per cent was clean."

The chapter on "Teaching Health" in this unique and well written report[3] should be suggestive and inspiring to any health educator. This paragraph on the health teaching in one of the towns of the county is a good sample of this part of the report: "Woodburn is one of the most important cities of the county and proclaims itself the world's best berry center. In its modern high school building the home economics department runs a cafeteria where nourishing food, well cooked, is served at a nominal cost. The girls study their own diet while they learn cooking, and healthful principles of clothing while they learn dressmaking. Every year the school runs a fashion show for the benefit of the out-of-town youngsters who are about to enter high school, and the teacher all but makes the wearing of low heels a requirement if a girl is to pass her course.

"School boys in Woodburn study personal hygiene in their science classes. In the grade school two or three teachers are doing exceptional health teaching with the help of 4H Clubs in the higher grades. Eighth grade children build model farms in their agricultural course and discuss the feeding of human beings as well as live stock. When the nurse gave a course in baby care the boys as well as the girls wanted to take it; a separate class



of boys was organized, and though they begged the nurse to stand guard at the classroom door so the girls would not see them bathing the baby, they thoroughly enjoyed it."

This report of actual achievements would be a valuable reference work for classes in health education.

1. Pp. 39. American Child Health Association, New York, 1929.

2. Understanding Children's Behavior. Health Bulletin for Teachers, No. 13. Pp. 4. Metropolitan Life Insurance Company, New York, 1930.

3. Children of the Covered Wagon. By Estella Ford Warner, M.D., and Geddes Smith. Pp. 123. Price, $1. Commonwealth Fund Division of Publications, 41 East 57th Street, New York. 1930.

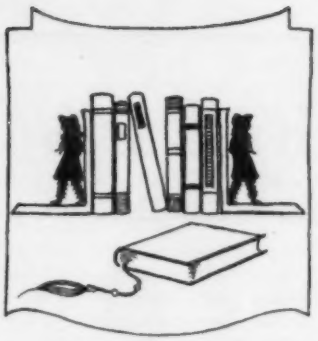
A NEW volume[4] has been added to the series of health books by Dr. Turner of the Massachusetts Institute of Technology. It is adapted to work in the junior high school or the early senior high school, and is designed for a serious course in physiology.

AS ONE approaches "Teaching and Learning in the Elementary School,"[5] a new and stimulating book by Dr. Mossman, one is keenly aware that the tremendous change which has come about in educational theory within the last decade is now steadily registering itself in school practice. Promotion is still based on the performance in formal subjects and those dependent on verbal memory, but leaders in education are practically unanimous in the belief that schools should assume larger responsibilities for growth in citizenship and in ability to meet everyday problems of life. The mere assignment of lessons and the testing of pupils upon verbal memory is inadequate to the attainment of such results, for the facts learned tend to be dissociated from life activities. From the point of view of the newer psychology, efficient and happy living is considered as the art of living. How do children acquire tastes in literature, music or social virtues? The answer is that "learning is the outcome of doing." One gains skill in health behavior also by doing. The modern school sets up a program of learning in group activities.

Unfortunately Dr. Mossman, like many writers on educational theory, although sound in her point of view, pays little attention to health education, but her theory of elementary education and the principles of teaching and learning discussed are clearly presented and so challenging to the instructor that teachers of health should get much help from the perusal of her book. We recommend it heartily.

Many teachers would like to criticize their own teaching but frequently they lack criteria in making judgments. Since habit and skill play so significant a part in health teaching, the following questions carefully answered and discussed in the text relative to the lesson should help teachers of health to evaluate their procedures:

1. Is it the purpose of the learners to acquire this specific skill or to strengthen this habit?
2. Do the learners know exactly how to proceed before they begin to practice?



3. Are the first attempts at practice so safeguarded as to secure some measure of success?
4. Are the children giving close attention to their practice?
5. Is the time given to practice properly distributed?
6. Does the practice period end with some measure of achievement?
7. Are the children interested in keeping a record of their scores?
8. Are there occasional needs arising which call for the further use of the skill?
9. Is there overlearning?

Consider some lesson or series of lessons that you have given or are giving that have habit forming and skill as objectives. Can you answer "Yes" to each of the foregoing questions? If you do not know why you should be able to give this answer consult Dr. Mossman's volume, pages 76-80. After that you will find this volume so intriguing that you will want to go on testing your other health procedures by some of the criteria suggested by Dr. Mossman. The thoughtful study and use of this book in the way suggested could not fail to result in more effective teaching.

4. Physiology and Health. By C. E. Turner. Pp. 282. D. C. Heath and Company, Boston, 1929.
5. By Lois Coffey Mossman, Ph.D. Pp. 292. Houghton, Mifflin Co., Boston, 1929.

TEACHING HEALTH

(In this column will be published each month concrete examples of good health teaching. Teachers are invited to send in contributions not exceeding 600 words and preferably less to the editor of this department. Illustrations of the actual work of children will be welcomed. Contributions accepted will be paid for but no manuscripts will be returned.)

SHOULD WE USE THE EXPRESSION "PURE BLOOD"

WE BECOME so accustomed to some phrases commonly seen in print that we fail to appreciate how lacking in clear meaning they may be. The term "pure blood" is one of these. Nearly everybody uses the term. When I ask any one what he means by it he is usually unable to give any meaning. Occasionally some one says, "blood that isn't bad," or "blood that hasn't anything bad in it." Or sometimes it is explained that pure blood is in the arteries and bad blood in the veins, or that bad blood goes to the lungs and good blood, or pure blood, returns from the lungs.

The common practice of printing diagrams of the heart and blood vessels in red and blue is further misleading. We commonly think that pure blood is red and bad blood is blue. If we should print the left side of the heart bright scarlet and the right side dark red the colors would nearly approximate the blood colors.

Let us always teach that blood carrying much oxygen and little carbon dioxide is bright red and blood carrying much carbon dioxide and little oxygen is dark red, and never use the term pure blood instead of oxygenated blood. If we do use the shorter word our students will catch it, fail to get its significance and employ it with all sorts of indefinite meanings.

Blood coming from the kidneys is in a sense purer than blood going into the kidneys. Instead of using the indefinite word "pure" it would be better to say that blood going into the kidneys carries more waste urea than does blood coming from these organs. It is better to use a longer phrase that expresses a concrete, definite thought than a short term that lacks clearness.

Advertised medicines promise to purify the blood. You ask what impurities they would take out and you rarely get an answer more definite than "the impurities of disease." This notion of impurities in the blood complicates whatever hazy meaning there may be in the term "pure blood."

Some persons insist that bad blood causes pimples, boils and all sorts of skin eruptions. They often quote the doctor as authority for the statement. I suppose doctors do sometimes, from lack of time or ability to make a clear explanation, use the phrase. Such a meaningless subterfuge should not be tolerated. If one cannot explain the cause of skin eruptions one should admit this inability and not cover it up with a catch phrase. Pimples and boils may develop because of some germicidal deficiency in the blood, but to say that they are caused by bad blood lends support to the old notion that boils are vents for discharging the corruptions of the blood—worth $5 each.

Let us not admit that there is such a thing as bad blood. Let us not use such terms as "good blood" or "pure blood," but rather terms the meaning of which is clear—blood containing much oxygen, blood containing much carbon dioxide, blood containing much urea, blood containing little urea, blood that kills germs readily, blood with little germicidal power.

RALPH E. BLOUNT,
John Marshall High School,
Chicago, Ill.

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Questions *and* Answers

Baldness

To the Editor:—All my paternal male ancestors have become almost totally bald at early ages. I am now 30 years old and so far as I can tell I have no tendency toward baldness. The color and texture of my hair are different from that of my father; it seems to have more luster and life. Would it appear to you that I can now look forward to escaping the family curse?

G. H. C., New York.

Answer.—There is a distinct hereditary tendency in the matter of baldness, as there is also of premature grayness. It seems probable that this young man has not inherited this tendency to premature baldness, but we know of no authority who could give him assurance as to what the future years may bring forth.

Perforation of Ear Drum

To the Editor:—I like a young man very much, but he has a perforation of the ear drum. Is that curable? This young man tells me it is curable. T. P., Utah.

Answer.—Perforation of the ear drum is a common result of inflammation of the middle ear. In many cases it heals completely; in other cases it may remain unhealed, even though the hearing may not be impaired.

Whether or not a particular case is curable can be determined only by a competent physician after a careful examination.

Pain in the Coccyx

To the Editor:—I am troubled with an inflammation on the bone at the end of the spine. I suffer with pain constantly, especially on exercising or in cold weather. I have less pain in hot weather. Could you give me a list of foods that are good for the bones?

J. B., Wisconsin.

Answer.—It seems probable that the trouble at the end of the spine is what is known as coccygodynia. This term is applied to pain in the coccyx (the bone at the lower end of the spinal column) and the neighboring region as a result of rheumatism, neuralgia or injury to the bone. There are no foods that will change the condition of the bones so as to relieve such trouble. Sometimes the only relief is through removal of the bone by means of surgical operation.

The only thing for one who has trouble of this sort to do is to have herself carefully examined by a competent physician, who can determine the real nature of the trouble and advise as to treatment. The family physician should be able to recommend a specialist.

Interrelation of Glands

To the Editor:—I should like to obtain information on the interrelation between the parathyroid and the suprarenal glands.

W. J. C., Connecticut.

Answer.—It is not possible to make a definite statement about the interrelation between the parathyroid and the suprarenal glands, because knowledge of this matter is incomplete. About all that is known of the physiology of the parathyroid glands is their relation to tetany, a peculiar disease, especially of childhood, associated with muscular spasm. There is further involved the question of the metabolism of calcium.

Paresthesia

To the Editor:—What is paresthesia? If it is a disease, what causes it and can it be cured? What is the usual course taken? Does it lead to paralysis?

T. J. H., Illinois.

Answer.—Paresthesia is an abnormal, morbid or depraved sensation, such as a burning, prickling or formication (feeling as of ants crawling over the skin). It is not a disease, but a symptom of a variety of nervous conditions. The cure is, of course, the cure of the condition that causes it. It does not lead to paralysis, though it might possibly be a symptom of some condition associated with paralysis. One afflicted with such symptoms should consult a physician who devotes his attention exclusively to diseases of the nervous system.

If you have a question relating to health, write to "Questions and Answers," HYGEIA, enclosing a two-cent stamp. Questions are submitted to recognized authorities in the several branches of medicine. Diagnoses in individual cases are not attempted nor is treatment prescribed. Anonymous letters are ignored.

Diet

To the Editor:—What sort of diet is appropriate for persons who have recovered from stomach ulcers or for those who have a tendency to acid stomach? In other words, what are the foods that are known as base-forming rather than acid-forming? I am especially anxious to know whether there are any fruits or vegetables that may be eaten raw, and whether cheese and shellfish are allowable.

B. A. H., California.

Answer.—The diet suitable for one who has recovered from ulcer of the stomach varies in different cases and cannot be intelligently prescribed except by the physician who has seen and studied the case. Mere selection of base-forming instead of acid-forming foods would be of little value because some of the foods of either class would be unsuitable.

The rigid diet of very bland, unirritating food, beginning with milk only, which is followed in treatment of many cases, must be continued for a considerable period and then can be gradually increased by the use of eggs and certain cereals and, later on, other foods.

One who has had a gastric ulcer ought to continue under the care of a physician until it is certain that she has fully recovered from it and can be allowed to eat almost anything that she desires.

Short Forearm

To the Editor:—What would be the cause of an extremely short forearm in a person otherwise physically perfect? Is there any way in which it can be developed to normal size in an adult?

E. C. L., California.

Answer.—The short arm in the case mentioned is, we assume, a congenital defect. There is no way to prevent this occasional—fortunately rare—congenital deformity, nor do we know of any way in which the arm can be developed to normal size.

It is possible that this person was at some time a victim of infantile paralysis. If so, it would require a careful examination and study of the case to determine whether any measures at this time would be of value in partially restoring the arm to a normal condition.

Malaria

To the Editor:—Would malaria mosquitoes in Java cause the disease? A person who let himself be bitten more than six months ago has within the last two months or so been subject to occasional fever spells accompanied by chills. They have been of only twenty-four hours' duration, however. Is malaria a dangerous or contagious disease? Is it curable? If so, how?

J. L. P., New York.

Answer.—Malaria mosquitoes in Java are capable of transmitting malaria just as they are in other parts of the world in which malaria prevails. The only way to ascertain whether a patient has malaria is by examination of the blood for malaria parasites. These are always present and can be found by a competent examiner when patients are having active malarial fever, or chills and fever.

Malarial chills and fever occur every day or every other day for a considerable time unless they are controlled by quinine or remedies containing quinine. If this patient did not take any quinine to stop his chills and fever and they stopped anyway, this would be good evidence that these symptoms are due to something else and not to malaria.

Malaria is not contagious, but is transmitted from one person to another by certain species of mosquitoes and in this way only. It is not dangerous when promptly and properly treated. It can always be cured by proper administration of quinine for a sufficient length of time.

Ear Phones

To the Editor:—Do persons who wear ear phones suffer a less or greater amount of hearing loss, because of their using such ear devices?

H. F., California.

Answer.—Electrically operated ear phones are of considerable aid to many persons, especially those who have trouble with the sound conducting apparatus of the middle ear. To those who have a marked change in the auditory nerve or the nerve of hearing, ear phones give only slight improvement. There are some ear phones with which it is possible to magnify the sound greatly and these are sometimes useful for persons who have a considerable change in the nerve of hearing. Many ear phones have certain outside or adventitious sounds, and these sometimes annoy the person who wears them. Naturally any sound which enters the ear and which is not directly connected with the tone that the person is trying to hear disturbs him to a certain extent. However, in the newer instruments, these sounds have been eliminated to a considerable degree.

Before deciding whether an ear phone would be of benefit, it is better for the patient to have a thorough examination by an ear specialist, in order to find out what type of hearing impairment is present and the extent of it. The wearing of the ear phones does not diminish the hearing in any case, and so far as is known their use does not injure the ear. In other words, while not too much should be expected from ear phones in cases in which the hearing is greatly impaired, nevertheless they do aid many to such an extent that their lives are made happier and more useful.

Flaxseed

To the Editor:—What effect on the intestinal mucous membrane does flaxseed have when taken internally as a tea mixed with extract of licorice and gum arabic? What effect does a flaxseed poultice have on the intestines when applied externally with a heated pad?

B. C., District of Columbia.

Answer.—Flaxseed when taken internally acts as a mild laxative by its mechanical effect on the bowel wall. It has no constituent that acts as a drug in stimulating muscular movement of the intestines, but the mucilage-like material which the flaxseed yields when mixed with liquid lubricates the bowel and promotes bowel movement.

A flaxseed poultice applied to the abdominal wall is simply a method of applying moist heat. It was used largely in earlier days because it retains the heat for a long period, but a cloth wrung out of hot water and applied to the abdominal wall with a hot water bag over it has the same effect and is a much easier and cleaner method.

Diet for Gallbladder Trouble

To the Editor:—What diet is indicated in gallbladder trouble? I have been told that butter, cream, all fats, meats, fish and eggs must be eliminated. What about coffee, tea, postum and chocolate drinks?

G. C., Illinois.

Answer.—Diet in gallbladder trouble varies a good deal with different persons, depending on the nature of the case. Foods containing much fat not infrequently give trouble to persons suffering from gallbladder trouble, but not always. Whether in a particular case they should be rigidly excluded is something to be decided by the doctor in charge of the case.

Coffee is sometimes found to be not well borne and tea and postum may be preferred. Chocolate might disagree, because it contains fat.

Cancer

To the Editor:—In a book entitled "Possible Worlds," by J. B. S. Haldane, in a chapter on "Cancer Research," the author writes: "I should look askance at the indiscriminate use of such substances as vaseline, which may very well contain the cancer-producing body found in paraffin and lubricating oil, which certainly contains it." This was of particular interest to me as a member of my family had a cesarean operation followed by an obstruction in the bowel. The surgeon ordered vaseline about the size of a walnut to be taken at night. She has been doing this and apparently is in excellent health. When the baby was about a year and a half old the mother thought she would discontinue taking the vaseline. A toxic condition developed. When she went to the obstetrician who had performed the operation, he said to continue with the vaseline, which she has been using for three years.

E. K. B., Pennsylvania.

Answer.—While it is true that crude tar when applied to the skin of certain animals, as mice, may produce cancer, there is no evidence that the refined products of the distillation of petroleum, such as petrolatum, will act in this way at all. In fact, there is much evidence to show that these bland, unirritating substances are entirely harmless, either when applied to the skin or when taken internally.

Empyema

To the Editor:—What is the general opinion among doctors as to an operation for empyema, the operation consisting of the removal of several ribs or portions of several ribs? Is such an operation definitely conceded to effect a certain cure, or is it still on trial? If and when ribs or portions thereof are removed, what is the general prognosis; to what extent does the patient regain normal health?

T. P. O., Illinois.

Answer.—Empyema is an accumulation of pus in the pleural cavity. There is an old dictum in medicine which in Latin reads "Ubi pus ibi evacua." This means "Where there is pus evacuate it." In many cases of empyema it is possible to remove the pus by making an incision between the ribs and inserting a drainage tube. When the pus is thick, a larger tube must be used, which, in some cases, necessitates the removal of a section of a rib. When the pus has become organized at all or is difficult to drain, and cannot be removed in any other way, it is sometimes necessary to remove a section of three or four ribs. If the condition of the patient is good, the operation is usually successful.

Teeth Stained by Chemicals

To the Editor:—About three or four months ago, my dentist, at my request, used a solution of formaldehyde on three of my lower front teeth at the gum line, in order to toughen the tissue. The teeth were sensitive at that point as a result of an acid condition in the mouth, plus a slight degree of decay. Although the tissue was hardened by the action of the formaldehyde a jet black stain, 1/16 inch deep, has been present ever since the treatment. The teeth were treated twice. Is it possible to remove these stains? If so, how?

N. W. B., New York.

Answer.—Possibly silver nitrate solution and formaldehyde were used on the sensitive areas of the teeth near the gum line. Dentists frequently use an ammoniacal solution of silver nitrate and a 25 per cent solution of formaldehyde in treating root canals and sensitive teeth. Hence it is possible that the black line mentioned is a deposit of metallic silver formed by the reducing action of the formaldehyde on the alkaline silver solution.

The stain may be removed by the continuous action of tincture of iodine, followed by the use of sodium thiosulphate solution and hot distilled water, or by the action of solutions that yield active chlorine, followed by washing with hot water.

"Seven Year Itch"

To the Editor:—What is the nature of the seven year itch parasite? How may one become infected and what cure is there for it? The greasy ointments are unpleasant and oftentimes ineffective. Is there a prescription that would not be so difficult to use?

A. C. K., Indiana.

Answer.—There is no cutaneous disorder known as "seven year itch." Ordinary itch (scabies) is due to a small parasite (*Acarus scabei*) that burrows into the superficial layers of the skin causing an irritation that results in itching; the parasite when removed from the skin can be seen with a low power magnifying lens. The itching is usually worse at night, after the patient goes to bed. The areas involved most extensively are between the fingers, under the arms and in the groins; after the disorder has continued for a number of weeks, most of the body surface from the shoulders to the knees may be involved; in infants and small children the entire body surface may be more or less involved. Scabies is distinctly a family disorder transferred by contact from one person to another.

In untreated cases the itching may persist for an indefinite time. Cases of undoubted scabies have been known to persist one or two years; whether or not the disorder can persist for seven years is a question. In cases in which the itching has persisted for years, the probability is that it is not due to scabies. There are many factors that may produce itching of the skin, either local or generalized and continuing for months or years. Persons so afflicted should consult their family physician and learn the exact nature of the trouble.

A sulphur ointment of the proper strength is the best treatment for scabies. It should be used only under a physician's direction and should not be prepared at home; if too much sulphur is used in the ointment, an irritation of the skin results which may be more annoying than the original scabies and which will persist as long as the sulphur ointment is used. The percentage of sulphur in the ointment should vary in different cases; a smaller percentage is used in children, also in adults with hypersensitive skins. In other words, each case demands special care and attention and should be treated only under a physician's direction.

Neuritis

To the Editor:—What is neuritis? What causes it and is there a cure? If it is in the muscles of the leg, is it all right to use them, even if painful? G. H., Ohio.

Answer.—Neuritis is an inflammation of a nerve. It may be caused by injury, by certain poisons, among them alcohol, and often accompanies other conditions, such as rheumatism and some of the infectious diseases.

Whether or not the use of the muscles of the leg or other parts in such a condition is wise and to what extent depends entirely on the condition present as to the type and severity and must be decided by a physician thoroughly familiar with all of the conditions in a particular case.

Bruising

To the Editor:—Every time I clean windows my arms get discolored from reaching. Black and blue spots appear.

A. F., New Jersey.

Answer.—Unless the arms are bruised slightly in cleaning windows by striking them against the window frame, it may be that mere stretching upward of the arms into this unusual position ruptures some of the small blood vessels that are not of normal firmness and this results in slight hemorrhages, which become black and blue spots.

It is impossible to determine the nature and cause of the trouble without seeing the patient. She should consult a physician.

Keratosis Pilaris

To the Editor:—Please tell me what a man should do in the care of his own face when he is suffering with keratosis pilaris. He is 45 years old. What can the general practitioner be expected to do for such a condition, and with what success? Can a competent skin specialist be expected to cure this condition? On what factors will a cure usually depend? Have there been important recent advances in treatment? What conditions are present in advanced cases of keratosis pilaris? Please let me have references to the most important literature on this subject.

J. C. W., Tennessee.

Answer.—Keratosis pilaris is a disorder of the skin characterized by the presence of small horny plugs, usually pierced by a fine downy hair. It is usually found on the outer surface of the upper arms and on the thighs, more rarely on the face. The cause is not definitely known and there is no cure for it in the sense that a physician can promise a patient there will be no recurrence. Even in pronounced cases the skin can be kept quite smooth by frequent bathing with soap and warm water and by applying once daily an ointment, which a physician can prescribe, and continuing its use for a long period of time. A daily cold sponge in the morning is beneficial for those who can tolerate it. Nothing of importance has been added to the treatment in recent years. As a rule, there is no tendency to the development of malignancy even in severe cases of long duration.

Any recent edition of a recognized textbook on dermatology will give a complete description of the disorder.

Straightening Crooked Teeth

To the Editor:—What is your advice concerning the straightening of crooked teeth? At what age should this be done? My 8 year old daughter has an upper front tooth that sits at about a 30 degree angle. There is plenty of room between the other teeth for it to be set straight.

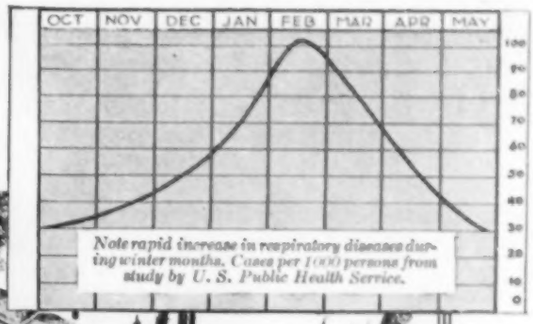
H. W. E., Illinois.

Answer.—The correction of malocclusion, or irregular or crooked teeth, is always advisable. Usually, this should be done as soon as the irregularity is noted and can be accomplished more successfully if done at an early age than if it is delayed.

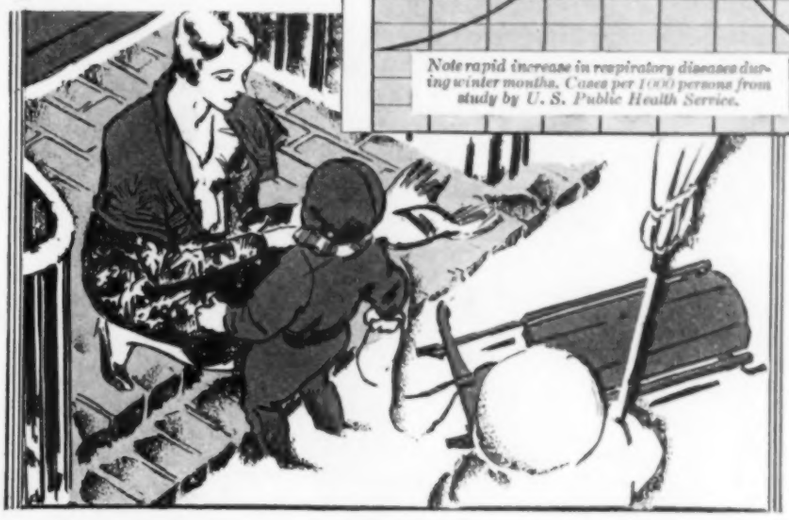
If there is plenty of room between other teeth for the malposed tooth, this would be the ideal time to have the work done because after a period of time, the other teeth shift in their position and the necessary space is lost, which complicates management.

Guard Against These Dangerous Months

with the disease resisting health building benefits of



Note rapid increase in respiratory diseases during winter months. Cases per 1000 persons from study by U. S. Public Health Service.



Cod Liver Oil *concentrated in these* Candy-like Wafers

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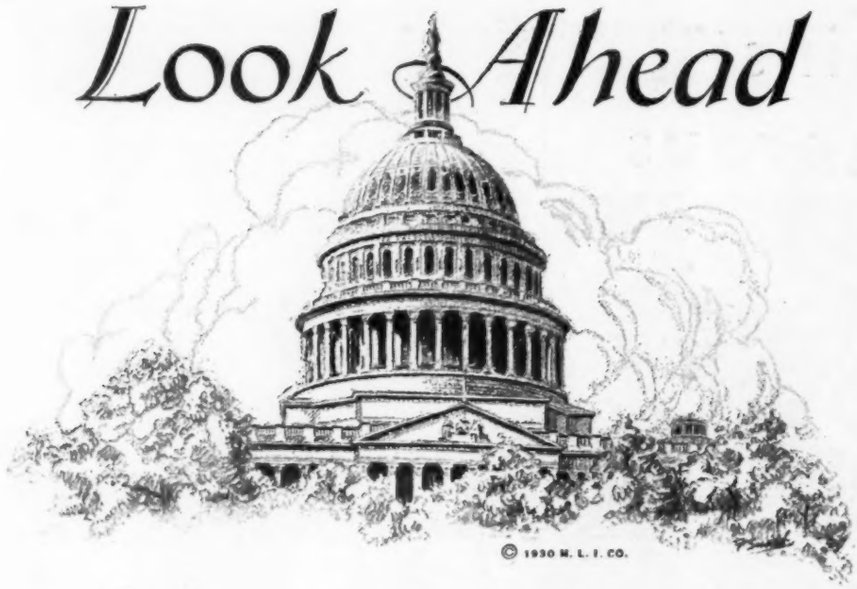

Men enjoy a good laugh at their childhood fears. One confesses he was afraid of the bogeyman, another was afraid of the dark, the next was always afraid of a policeman. They laugh about those old fears now.

Last year some of the grown-up children who had not studied too closely the history of business throughout the ages, and more especially the history of the United States, were frankly scared at the abrupt interruption of boom times.

Business depressions have always followed widespread, reckless speculation. The readjustment period is a trying time for even the wisest and most stout-hearted.

But while the United States has been in the doldrums again and again, a review of its history should make even the most pessimistic person optimistic. The prosperity which follows hard times comes sounder and stronger and the country keeps on growing richer.

It is no more sensible to worry over gloomy predictions concerning the business future than it was to worry about the bogeyman.

From the time the country was founded, men have worried about its future and the ever-increasing scale of wages. John Jay, the first Chief Justice of the Supreme Court of the United States, was disturbed by the growing cost of living in 1784. He wrote, "Wages of mechanics and labourers which are very extravagant", at a time when skilled mechanics were paid sixty cents a day and laborers thirty-nine cents.

The history of panics and business depressions followed by mounting levels of prosperity, with higher wages and shorter working hours, is worth reading. The Metropolitan Life Insurance Company will be glad to send free a copy of "The Development of Prosperity in America." Ask for Booklet 1-G-31.

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Frequent Colds

To the Editor:—My brother has frequent and severe colds. If he goes one day without a bowel movement he has symptoms of a cold; if he eats two pieces of candy, dessert or a piece of cake, the very next day he will have a cold. Each year at the same time he comes down seemingly within a half hour with a heavy cold, which confines him to his bed. He will seem to be recovering at the end of eight or nine days but will suddenly become reinfected. This last winter he was reinfected five or six times and as this is the fifth year in succession that he has had to spend the month of February in bed it seems as if something could be done for him. Do you think it is food sensitiveness? Would you suggest "cold serum" or change of climate or what?

H. V. P., Maine.

Answer.—This case is apparently one of those in which natural resistance to infections like colds is below par. Much study has been devoted to this matter and serums and vaccines have been tried on a large scale. It is evident, however, that the majority of physicians whose opinion is most entitled to weight have not been impressed with the results of this treatment, and serums and vaccines are not used by such men.

Frequent causes of these colds are apparently temperature changes such as are experienced when one goes from an excessively warm house into cold air outside. It has been clearly proved that when homes, schools and work places are kept constantly at a lower temperature, say from 60 to 65 F., and when the clothing is just sufficient for comfort, the residents, if well wrapped when they go outdoors, will be much less likely to have colds than if they live and work in overheated rooms. The taking of a cold shower each morning followed by a brisk rub-down of the skin has been helpful to many.

Of course, any person may have a chronic inflammation of the sinuses connected with the nose, and when this is the case, repeated colds are readily accounted for. When such sinus trouble is present it should, of course, be treated by a competent physician.

All other preparations may have been made but the child who has not been vaccinated against smallpox or immunized against diphtheria is not completely ready to go to school.

Don't catch the fidgets.—*Dr. Oliver Wendell Holmes.*

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Sensitive Skins

To the Editor:—1. Can a person who is poisoned by the fumes of chemicals ever become immunized? My husband is superintendent in a chemical plant and while he does not actually work with the chemicals he breathes the fumes and they poison his skin like ivy poisoning. He gets along fine with a mask but it gets too hot in summer. 2. My daughter, 13 years old, has, I suppose, a chronic case of what skin specialists have called "seborrheic dermatitis." She is husky otherwise, strong and passes all health tests. Can you tell me if it is possible she might outgrow the disorder a little later? Is it a disease of the blood or the glands?

G. E. B., Missouri.

Answer.—1. Properly speaking, the term "tolerance" rather than "immunity" should be used in connection with the adjustment of exposed persons to the action of chemicals. A few substances, much used in industry, lead to the destruction or nonformation of those bodies in the blood that provide immunity and resistance to a variety of diseases. The best known in this group is benzol. Workers breathing this substance as a gas are prone to infections. A few industrial gases appear to provide a tolerance after continued exposure. Sulphur dioxide is an example. A newcomer in a refrigerator plant using this gas is immediately made most uncomfortable by minute traces in the air, but in a few days all such things as coughing, sneezing, burning of the eyes disappear. This has led to the concept that a tolerance has been brought about. This probably is not true. Inflammation of the throat and nasal passages provides increased secretions which make the delicate tissues less accessible for irritation. In general, it may be maintained that neither immunity nor tolerance is acquired in industrial plants through prolonged exposure.

On the contrary, the skin of workers exposed to industrial irritants is likely to become increasingly sensitive, with the result that minute traces of the irritant may produce an acute flare-up. On this account, it may become necessary to change the occupation to an entirely different line of work.

2. Seborrheic dermatitis is probably a parasitic disease, but it is much influenced by gastro-intestinal conditions, anemia, menstrual disorders, diet and clothing. In otherwise healthy persons, this disease frequently responds to careful treatment, although recurrences are common. Persistent treatment may in time lead to the permanent disappearance of this abnormal state.

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Ozone Generators; Lamps

To the Editor:—1. Are "ozone generators" to be recommended for home use in the sleeping room? Are they of benefit to one who has had pulmonary tuberculosis, when the disease has been in an arrested state for ten or twelve years? Can they be of benefit to one having the nervous disorder known as shell-shock? If so, is there any particular type to be recommended? 2. Are carbon or mercury vapor lamps to be recommended in these conditions, separately or in conjunction with the "ozoner"? Are the lamps to be recommended for an indoor worker? Is it possible for an inexperienced person to apply this treatment to himself? Which type is to be recommended? Which produces quicker results? Would you recommend the purchase of such equipment for a family of four?

J. J. E., Indiana.

Answer.—1. We know of no satisfactory evidence that ozone generators are of value. Some years ago a prolonged investigation of one of these machines was made by a member of the faculty of Rush Medical College in the dispensary of that institution, in which various patients were submitted to the treatment of the ozone generator, but the final conclusion was that it produced no appreciable effect of any kind.

2. Ultraviolet light ought to be used on the recommendation and under the direction of a physician who is familiar with its effects, because it is easy to do harm with such generators. There are some physicians who feel that, carefully used, they may be helpful in preventing disease. The subject is discussed fully in a book entitled "Sun Rays and Health" by Millar and Free, published by Robert M. McBride & Co., 17 West 16th Street, New York City, and priced at $1.50.

Removal of Ovary

To the Editor:—Does the removal of one ovary shorten the life of women having such an operation? Does the removal of one ovary hasten the menopause? Does it ever in any way prevent conception? Does it contribute to ovarian dysfunction, lack of regularity of menstruation?

R. G. F., California.

Answer.—There is no reason to believe that the removal of a diseased ovary shortens the life of a woman or hastens the menopause. A woman with one fairly healthy ovary has no evidence of dysfunction, as a rule, and she may have children except for other conditions present, such as obstruction in the tubes or sterility of the husband.

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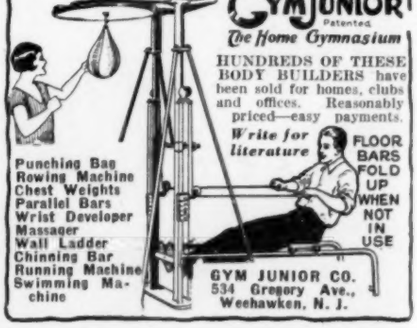

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HYGIENIC LABORATORY TO BECOME NATIONAL INSTITUTE OF HEALTH

New possibilities for medical research have been opened by the creation of a National Institute of Health, authorized by an act of the last session of Congress. By this act the Hygienic Laboratory of the United States Public Health Service is to be expanded into a new institution which may accept donations from philanthropic sources for the purpose of carrying out studies, investigations and research in the fundamental problems of disease.

The Journal of the American Medical Association reviews briefly some of the outstanding achievements of the Hygienic Laboratory, which it brings as a heritage to the new National Institute of Health.

The first large undertaking of the Hygienic Laboratory when it was established under government auspices in 1901 was to put the commercial production of vaccines, serums and similar products on a safe and scientific basis. So thoroughly has its plan of inspections and licensing been developed that today the practicing physician in the most remote section of the country has ready access to dependable biologic products.

The essential cause of pellagra and its method of prevention were worked out by the late Dr. Joseph Goldberger and his associates in the Hygienic Laboratory. The recognition of the nature, the cause and the method of transmission of tularemia was accomplished by medical scientists attached to the laboratory, the only instance in which American physicians alone have solved the complete problem of a disease. These are only two high spots; a complete review of the activities of the Hygienic Laboratory would comprise many columns of print, *The Journal* comments.

Provision is made in the plans for expansion in the way of buildings and for the appointment of scientists to carry on investigations in any part of the world. The facilities of the institute are to be available to health authorities of states, counties or municipalities for purposes of instruction and investigation.

Numberless problems await solution, *The Journal* observes. The so-called constitutional diseases, infections of remote or unknown origin, nutritional disturbances and the growth of cells are among the studies that will be taken up at once, while other problems will be considered when facilities for them are available.

"Colgate's is by far the best cleanser"

says

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GO to an eminent consulting chemist, an authority on scientific research, for convincing proof that *Colgate's cleans teeth better.* Such an authority is Jerome Alexander of New York. Let his test—his scientific experiments—convince you as they convinced him.

Jerome Alexander made impartial, exhaustive studies of the cleansing action of well-known dentifrices. Colgate's was undeniably more effective. Why?

Because Colgate's gets down into the tiny crevices where decay begins. Because its penetrative foam brings to the surface food particles that are never reached by sluggish toothpastes. Because—in Jerome Alexander's own words—"It penetrates into the tooth fissures, flooding away impurities which cause trouble."

Jerome Alexander's research agrees with the finding of such noted authorities as Dr. Hardee Chambliss, Dean of Sciences, Catholic University of America; Dr. Allen Rogers, head of the Department of Industrial Chemical Engineering, Pratt Institute; and others of equal fame who have been retained to make analytical tests and render expert opinion.

Jerome Alexander *says:*
"*I found that Colgate's penetrates into the tooth fissures, flooding away impurities which cause trouble. Therefore,* Colgate's is by far the best cleanser."

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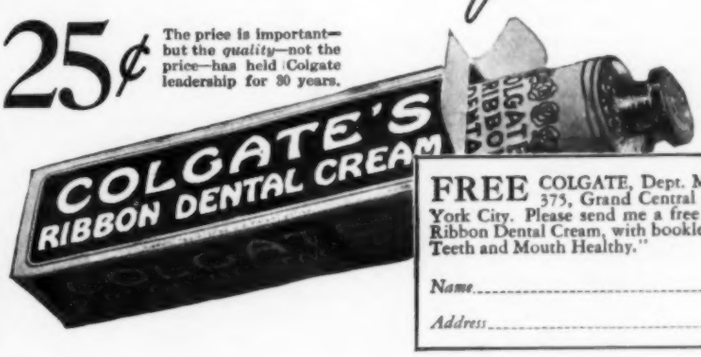

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Are all prepared from carefully selected materials, especially for growing babies and are immensely liked by them.

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MARYLAND AGAIN WINS NEGRO HEALTH AWARD

For the third consecutive year a county in Maryland has been awarded the silver trophy for the best county-wide Negro health program in a rural county, in connection with the observance of Negro health week, the health department bulletin announces.

This year's trophy was won by Kent County. Those of previous years went to Montgomery and Anne Arundel counties. The program included public meetings with showings of motion pictures, health conferences and clinics, demonstrations and exhibits, accompanied by a clean-up, paint-up campaign.

The clean-up campaign showed interesting results as follows: 108 lots or yards cleaned; 200 homes given a partial or complete housecleaning; 16 houses fitted with screens; 37 porches; 9 houses, 27 fences, 85 outbuildings and 16 roofs painted or repaired. Nearly 500 piles of trash were disposed of; 34 insect breeding places and 11 rat breeding places were cleared.

INJURIES FROM SPLINTERS MAY HAVE FATAL RESULTS

Splinters kill.

Thus strikingly the New York state department of labor expresses a safety message concerning apparently minor injuries.

Splinters are the most widely spread of all accident causes. Since it has been found that 80 per cent of the injuries from wood splinters and 86 per cent of injuries from steel splinters become infected, it is evident that the injured person should get medical attention at once before infection can set in. Many such injuries have become so badly infected that amputations have been necessary and even death has occurred from them.

SUMMER PLAY SCHOOL ON ROOF GARDEN

A roof garden play school with trained leaders in charge has been conducted for the last three summers by the Jewish People's Institute of Chicago on the roof of its building.

The school serves approximately 300 children ranging in age from 4 to 15, divided into four groups, according to an account in the *Playground*. Each group works on projects suited to its age. These include wood craft, clay modeling, hand work of various kinds, singing and dramatization. At the end of the summer an exhibit of the children's work is held, with a luncheon for mothers.

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After a year of hard times, work and worry, give yourself a break! Leave the lambs and wolves of Wall Street for the parrots and toucans of the Tropics, to forget care and build up for the coupon-cutting days ahead. Bermuda, Haiti, Jamaica, Canal Zone, Cuba, Bahama. —See these summer lands while winter rages. See them in company of a trained naturalist who speaks the language of the tropics and will lead you into its most delightful corners.

This black howler will be among the bird and animal welcoming committee in the tropics.

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PIONEER HEALTH WORK IN RURAL CHINA

Rural China is a virgin field for the application of modern preventive medicine and public health measures. More than 90 per cent of the people are illiterate and most of them are poor, ignorant and superstitious, living in mud huts blackened with soot and smoke, swamped with flies, mosquitoes, bed bugs, fleas and rats. Their lives are haunted by frequent sickness and death.

Ting Hsien County, a typical rural county, 170 miles south of Peiping, has recently been chosen for the location of a health demonstration under the auspices of the Chinese National Association of the Mass Education Movement with the financial support of the Milbank Memorial Fund.

In the autumn of 1929 a small dispensary and clinics were established at Ting Hsien City, the county seat, and a survey of health conditions was begun. In the spring of 1930 vaccinations for smallpox were carried out with great success. The quarterly bulletin of the Milbank Fund summarizes the program proposed for this demonstration.

The public health activities will be extended first by selecting specific health problems for attack. These will include relief of the more common and simple ailments of the general population, health education in the normal schools, medical service by clinics and limited hospitalization, practical research into methods of water purification and other phases of sanitation; birth and death registration and notification of some communicable diseases.

At the same time local subordinate and field personnel, including sanitary inspectors, public health nurses and midwives, are to be trained and later it is hoped that the work can be extended into surrounding villages. Finally the plan includes a health center which would provide: a small infirmary, a pharmacy, a laboratory, a lecture room and library for persons in training and an outpatient department.

The essence of the plan is to train Chinese personnel so that the program can be put into practice by the Chinese themselves. The Association, of which this health program is but one activity, has an all Chinese staff of more than 100 persons, many of whom are graduates of American universities, former professors in Chinese universities, government officials and leaders in various activities of a philanthropic nature.

call out the *Reserves*

to protect your child against winter diseases

How is your youngster doing this winter? Has he plenty of reserves in health to resist the treacherous ailments of cold-weather days? Or does he seem undernourished—a prey to every illness that comes along? His meals may lack Vitamin B.

Vitamin B is the policeman of your child's appetite. Whenever a child begins to fuss with his food, and fails to eat enough, the usual cause is lack of Vitamin B. Deficiencies in other vitamins bring on rickets, scurvy, colds and other diseases.

Vitamins can be obtained by giving your child Maltine With Cod Liver Oil. 70% is Maltine itself, a concentrated extract of malted barley, wheat and oats—rich in the vital Vitamin B. The remaining 30% is vitamin-tested cod liver oil (Vitamins A and D). Taken in orange juice in adequate dosage (Vitamin C) this preparation *provides a sufficient quantity of four vitamins (A, B, C, D) to promote health.*

Keep a bottle on hand in the kitchen cabinet, and stir it into the child's orange juice. Tests show that Maltine With Cod Liver Oil is much more palatable than plain cod liver oil. Every mother should have the booklet, "The Doctor Talks About Vitamins." Write for a free copy. The Maltine Company, 20 Vesey Street, New York City. Established 1875.

The A B C's of Vitamins

A "OFFICER A" *is essential to normal growth and helps protect against certain infections, especially those that attack the respiratory system. Maltine With Cod Liver Oil is a recognized rich source of Vitamin A.*

B "OFFICER B" *is most essential. Lack of Vitamin B results in loss of appetite, a cessation of growth, and the appearance of certain nervous disorders. Vitamin B (the Maltine vitamin) is found in abundance in Maltine With Cod Liver Oil.*

C "OFFICER C" *prevents scurvy. Orange juice is everywhere recognized as very rich in Vitamin C. That's why we recommend this policeman.*

D "OFFICER D" *is also necessary. A deficiency of Vitamin D causes rickets, that weakener of child bones. Sound teeth depend upon it. It is meager or lacking in all our ordinary foods. Maltine With Cod Liver Oil is rich in Vitamin D.*

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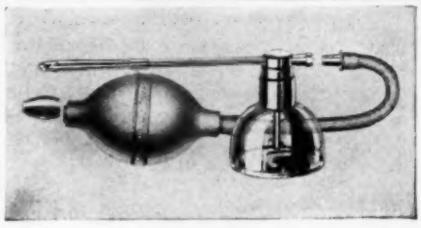

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U. S. NAVY HOSPITAL CORPS RECEIVES RIGID TRAINING

The care of the sick and injured on shipboard is in the hands of a highly trained medical department whose work is performed under conditions entirely comparable to those in the best hospitals on land, according to an account in the *Pacific Coast Journal of Nursing.*

A Navy recruit who enlists for the hospital corps takes an intensive course of theoretical instruction at one of two special schools, one at San Diego, Calif., the other at Portsmouth, Va. After sixteen weeks of this he is sent to a naval hospital for duty in the actual care of the sick, remaining there for about a year before he begins his sea duty.

Instruction is continued after the hospital corps man goes into active service, for promotions are made only after examinations to determine fitness. He may eventually specialize as a technician for laboratory, dental, clerical, pharmaceutical or x-ray work. On a modern battleship there are usually two doctors, a chief pharmacist's mate and from twelve to fifteen men in the various ratings.

Minor ailments and injuries are frequent among the large population of a battleship and there is constant opportunity for experience. Occasionally a surgical case requires immediate operation, and the hospital corps must be prepared to meet the emergency. In case the hospital ship is not at hand or if for any reason the patient cannot be moved, the ship's operating room is opened and the operation performed under the same careful conditions as are provided in any Class A hospital.

SCHOOLS CAN HELP FIGHT TUBERCULOSIS

Tuberculosis must be added to the list of diseases that can be combated with the aid of schools, Dr. Eugene L. Opie asserts in an article in *The Journal* of the American Medical Association, describing the results of extensive surveys among school children in Philadelphia.

The investigators found that from 1.5 to 2 per cent required special care and from 0.6 to 0.7 per cent should receive sanatorium treatment or its equivalent. Successful care of these children will require modification of the school regimen to prevent them from becoming overfatigued either mentally or physically. Regular periods of rest, sufficient nourishment, sunlight and fresh air will in most cases arrest the latent infection and thus help to prevent the development of adult tuberculosis.

INDUSTRIAL ACCIDENTS AMONG WOMEN WORKERS

Statistical confusion was encountered by the Women's Bureau of the U. S. Department of Labor when it attempted a study of industrial accidents to women during the eight years from 1920 to 1927.

Only twenty-one states had published any data for men and women separately during that time and only seven had published even the number of accidents for each of the eight years. In addition, the greatest variety in definitions of accidents and disability also prevailed.

In spite of difficulties in comparing statistics, however, certain useful facts were culled from them. These are offered in a report by Emily C. Brown as a contribution to the field of accident statistics for the information of the workers themselves, of employers, of the officials of state departments of labor and of the public.

Accidents to women were relatively fewer than those to men but the number of women injured was by no means negligible. In New York state as many as 7,000 women had received compensation for industrial accidents in one year.

More than half the injuries to women were in manufacturing, of which the food, clothing, textiles, metals, machine and vehicle industries caused the greatest number. Machinery was the principal cause of accidents to women in three of the states reporting, and falls were next in importance.

A larger proportion of the women than of the men injured were under 21 years of age. This indicates that insufficient protection is given to young workers under present conditions. As long as youth is careless and venturesome, accidents will occur unless safeguarding is more complete than seems necessary or possible in the case of adults, the investigator concludes.

CHILD LABOR DAY TO BE OBSERVED THIS MONTH

Child labor problems will be discussed in many schools, clubs, churches and other organizations during the week-end of January 24 to 26. This will be the twenty-fourth annual observance of Child Labor Day.

Although the figures of the 1930 census on the employment of children are not yet available, there is ample evidence that children are still employed under harmful conditions in every state, the National Child Labor Committee points out. Child Labor Day presents an opportunity for the people in each state to consider the conditions in their own communities.

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THERE is no excuse in allowing armpit perspiration to discolor and ruin your clothing, and its disagreeable odor to humiliate and embarrass you.

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NONSPI destroys the odor and diverts the underarm perspiration to parts of the body where there is better evaporation—and need be used on an average of but two nights each week.

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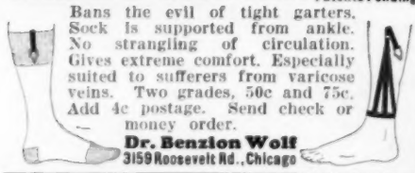

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Entertaining
The Convalescent Child

If children in your family are recuperating from the spring contagious diseases—measles, chicken pox, mumps—and are restless at being confined to bed, you will value this illustrated booklet with its suggestions for quiet amusements. Ideas for inexpensive games, cut-outs, home-made toys, etc. From prize letters in HYGEIA.

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AMERICAN MEDICAL ASSOCIATION
535 N. Dearborn St., Chicago

BOSTON HEALTH CENTERS HAVE ROOF SOLARIUMS

Undernourished children who are predisposed to or in contact with tuberculosis receive special health care in solariums built on the roofs of six health centers in Boston.

The roofs are covered with a kind of glass that admits the ultraviolet rays of sunlight and for dark days there are mercury quartz lamps. Thirty children selected by a physician of the city health department spend their days on each of these roofs for as long a period as the physician deems necessary.

A definite program is planned for the children every day. As soon as they arrive in the morning they put on sun suits. Then they have their breakfast. A special study is made of each child's food and health habits and an effort is made to correct bad ones. Each child is weighed weekly, is vaccinated, is immunized against diphtheria and is examined from time to time for signs of tuberculosis. Attention is also given to good mental health habits, with emphasis on individual responsibility and participation in group activities.

The educational part of this program is its most important feature, says Hazel Wedgwood, describing the plan in the *Bulletin* of the American Child Health Association. One of the rules requires that the child's mother or guardian must attend monthly meetings held for instruction in the proper care of these children. In this manner the parents have learned to introduce this new kind of living in their homes, thereby making the child's improvement permanent, the health workers hope.

A LESSON IN HEALTH EDUCATION

A very young but capable small person walked into the office of the state health department of Maryland one day last summer, says the department bulletin, leading her brother, two or three years younger, by the hand.

"If you please," she said, "I would like to have Jimmy vaccinated. He's 6 this summer and he can't go to school this fall unless he is vaccinated. Won't you please do it for me?"

The serious little girl then explained that her mother was working, that she was in charge of Jimmy and that there was no one else to bring him to the doctor.

"There is no use for Jimmy to lose any time from school," she remarked as her request was being granted.

PREVENT THAT SNIFFLE

Humidified air prevents many of those colds baby has due to dry heat in your home. What you need is a

BUDDINGTON HUMIDIFIER
"THE WICK DOES THE TRICK"

THE linings of baby's nose and throat are extremely sensitive, and dry, heated air irritates them. Fussiness, so often unexplainable in babies, is due in many cases to dry air that may go unnoticed by the grown ups. Buddington Humidifiers, by moistening the air, will help baby to breathe more easily—and to be more comfortable.

Buddington Humidifiers range in price from $2.75 up. Write for leaflet giving complete information.

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John's Vacation—For boys from 10 to 15 years old.

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PRICES—Single copies of any of the above pamphlets, 25 cents prepaid. In lots of four, 75 cents prepaid. Discount on quantities.

AMERICAN MEDICAL ASSOCIATION
535 N. Dearborn St., Chicago

PELLAGRA CURE DEPENDS ON PROPER FOODS

Pellagra is a serious health problem in certain sections of the South in which the dietary habits of the people, their economic status and the general financial depression are contributing to the spread of the disease, according to Dr. William DeKleine, medical director of the American Red Cross, in the Red Cross *Courier*.

The late Dr. Joseph Goldberger of the U. S. Public Health Service showed through his investigations that pellagra is definitely the result of a deficiency of a particular vitamin. It is not so much a question of sufficient food as the right kind of food. The typical pellagra diet, Dr. Goldberger found, is made up "largely of biscuits, corn bread, grits, gravy and syrup, with little or no milk and lean meat and but a small amount of vegetables and fruits."

The vitamin that prevents pellagra is found in pure powdered yeast and yeast is used for the treatment of the disease. It must be accompanied, though, by the right kind of foods. After the correct food habits are established the yeast is no longer necessary.

An extensive program of education in better dietary habits and better farming methods and the eventual improvement of economic conditions will solve the problem, Dr. DeKleine says. Schools may help by encouraging children to grow gardens and teaching them the importance of fruits and vegetables in the diet. Farm owners can do a great deal by seeing that their tenants have gardens and cows and do other simple things to improve their health. Until these things are done pellagra will not disappear.

IOWA TOWN WINS TROPHY FOR BEST HEALTH WORK

Ames, Iowa, won for the third consecutive year and thus acquired permanent possession of a silver cup awarded by an unknown donor through the National Tuberculosis Association to the city in the United States of more than 10,000 population which has the best school health program, *The Campaign* announces.

Some of the points in which Ames schools excelled are: physical examination of school children in grades 3, 6, 9 and 12 and physical inspection by a school nurse in alternate grades; a nutrition program; a dental program; summer round-up; immunization against disease; daily inspection of all children and cooperation among community groups.

Kleenex is better for children than handkerchiefs

These disposable tissues reduce spread of colds in families and prevent reinfection from a germ-filled handkerchief.

MORE and more mothers are supplying Kleenex in place of handkerchiefs.

Kleenex has the approval of school and health authorities, of doctors, of nose and throat specialists.

These authorities know the dangers of the common cold. They know a long list of serious diseases originate in the common cold. They know the cold causes more absences from school and work than any other ailment. And they know the hygienic value of Kleenex—the *disposable* handkerchief.

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Kleenex is the softest, gentlest tissue you could possibly imagine. Marvelously soothing to irritated little noses.

But far more important, Kleenex is sanitary. It is used just once, then discarded. Extremely low cost makes this less expensive than the cost of commercial laundering.

Beauty experts declare Kleenex to be the only safe and sanitary way to remove creams and cosmetics from the face. Indeed, Kleenex has a score of uses for every family that appreciates convenience, exquisite daintiness and cleanliness.

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protect your baby
from loose pins and buttons

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HOW he laughs and chuckles his delight! Happy Baby, safe from hurts which so often come from pricking pins and buttons that turn edgewise! His Vanta* Baby Garments fasten so snugly and comfortably with dainty bows of twistless tape, dressing the precious little body without turning or twisting. Adjustable, as Baby grows, never too tight nor too loose.

MOTHER-LOVE, seeking always the softest, downiest garments, finds Vanta* always is ideal, being recommended by doctors and nurses everywhere. Every prescribed weight of knitted fabric, of silk, wool, linen mesh, sase, rayon, cotton, each garment being of highest Vanta* Quality, guaranteed non-shrinkable, affording perfect protection at all times.

Ask your store for the original Vanta* Garments. If you cannot get them write EARNSHAW KNITTING CO., Dept. 1000, Newton, Mass. In Canada, write to J. R. Moodie Co., Ltd., Hamilton, Ont.

* Vanta—Trade Mark Reg. U.S. Pat. Off.

FREE TO YOU

Vanta Pattern, also "Baby's Outfit," a book of 64 pages on care and dressing of babies.

Earnshaw Sales Co., Inc.
Dept. 1000, Newton, Mass.

Without charge now or later send pattern and full instructions for making the new Vanta* square-fold, pinless diaper. Also Baby's Outfit book and illustrated catalog all in plain envelope.

Name_____

Address_____

City_____ State_____

PERTINENT ADVICE ON INFANTILE PARALYSIS

Infantile paralysis is a dangerously communicable disease.

It attacks children more frequently than adults.

The virus is carried in the body of the person who is suffering from the disease or who is a carrier of the virus.

The virus leaves the body in the secretions of the mouth and nose and in the body discharges.

There is reason to believe it is carried by flies and other insects from body discharges.

The virus has been demonstrated in the secretions from the noses of healthy persons who have been in contact with the sick.

Control depends on early recognition of the disease and immediate precautions to prevent its spread.

In most cases the early stage is shown by indisposition, fretfulness, fever up to 102 F., vomiting and diarrhea.

Following these there may be pain in the back of the neck or legs or sometimes in the abdomen, with later development of rigidity of spine, stiffness of neck and finally paralysis.

The family physician should be called for every ailing child.—*Louisiana State Board of Health.*

HOW AUTOPSIES ARE VALUABLE

The physician is often worried as to the condition that really exists. He often wonders after his patient has passed on just how the diseased organ would look and how much of it was invaded in the disease process. He feels that if he only had a chance to do an autopsy how much it would help him with the next case similar to it.

The people should consider the physician's desire to know what the autopsy would reveal and of themselves suggest such a procedure. The physicians can hardly take the initiative, but the relatives could do so and the knowledge revealed by such a procedure would be worth a great deal to those who follow after.

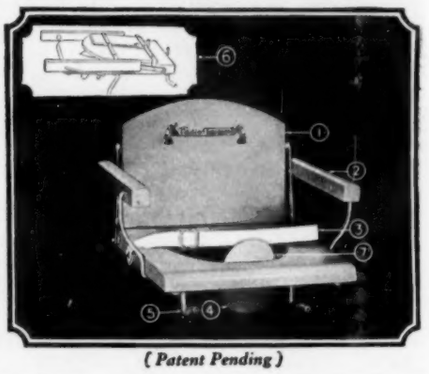
No harm could possibly be done. At present very little opportunity for morbid pathological study is offered the conscientious doctor.

No doubt if the dead could speak it would be in favor of fuller knowledge and broadened vision that can only come by sight, touch and the findings of the laboratory.

—*Georgia's Health.*

It is not how long but how well we live.—*Delille.*

The Kiddie Toylette No. 19



(Patent Pending)

NEW! AN INFANT SEAT *with* 7 SUPERIOR POINTS

Smallest Infant Positively Cannot Fall Off

THE only infant seat with positive lock front and back. Will not mar the finest finish of the adult seat. Finished in attractive nursery colors (Ivory, Pink, Blue, Green). Note these 7 points (indicated in picture) all important to you or to your Baby:

1—Full back set at comfortable angle.
2—Wooden arms with rounded edges.
3—Waist line safety strap. *See below.
4—Closed front and sanitary metal shield insures utmost cleanliness of adult seat.
5—The special clamps automatically lock seat in place when cover is raised.
6—Only one motion required to either attach or release this new seat.
7—Flexible rubber shield.

*The waist line safety strap is adjustable and is placed at the back of the seat and prevents the child from moving forward, thus keeping him properly positioned over the opening in the adult seat.

The sanitary advantages of the closed-front seat are obvious. But this new Kiddie Toylette No. 19 goes farther. It has a much-needed sanitary shield (No. 7, in picture)—metal below, where it extends into bowl, soft harmless rubber above; perfectly safe, perfectly sanitary.

A folder describing this PERFECT infant seat will gladly be sent upon request, together with a pamphlet describing 20 other baby specialties, such as the Auto-Comodate, Comfy Crib, Tub-a-lette, etc.

If your dealer hasn't this new seat as yet, send us his name. Or we will send one postpaid for $3.50. (State color wanted.) Satisfaction guaranteed.

1034 Jay Street Rochester, N. Y.

The NURSRY-CRAFTERS
(KENNEDY-McCANDLESS CORPORATION)

"A Child is to be Born"

Of the most absorbing importance to expectant mothers

AN ENCOURAGING AND SYMPATHETIC BOOKLET **15c**

American Medical Association · Chicago

PASADENA SCHOOLS ARE TEACHING PARENTS

Because home and school are often for a child two unrelated atmospheres hard to reconcile, the board of education of Pasadena, Calif., has instituted the experiment of parent education as part of the curriculum of the city schools. During the first year more than 300 parents met weekly under the leadership of a director of parent education or a group leader, says an account in the *Journal of Juvenile Research.*

This program, which represents a voluntary cooperative effort of parents, is planned to enlist their interest in present school procedures, and especially to teach them to discriminate among the many offerings that go by the name of psychology. It should serve to reduce the number of "bewildered homes" that are bewildered because they are the focus or even the battleground, on which parents are attempting, with all the industry at their command, to interpret for themselves present educational methods in the light of their own school days not yet so far in the past as to be blurred.

GIVE HEALTH KNOWLEDGE TO INDIA'S MILLIONS

India's slavery to disease and harmful customs is gradually being lifted. Health propaganda is spreading through such agencies as the Bombay Presidency Baby and Health Week Association.

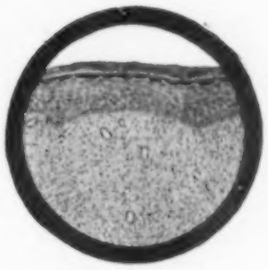
Through posters, motion picture films, lectures and health exhibits, thousands of India's backward population are learning to care for their babies and themselves. At one large exhibition described in the fifth annual report of this association, 273 models, instruments and apparatus and 608 posters translated into the local dialect were shown. It was estimated that 90,000 persons visited this exhibit in nine days.

In an outbreak of cholera at Sind, street lectures were organized to warn the people about the spread of cholera. Lantern slides lent by the association helped impress the lecturer's message more vividly on 3,000 listeners. Films have also been used with good effect in lectures to mill workers in the cities. As many as 3,000 working men are present at these meetings, the report says.

. . . To be mery in the herte is a grete remedie for helth of the body.—*Bishop of Arusiens, 1485. (From "A litil boke for the pestilence.")*

You can't wear gloves on your Lips—

BUT they need protection just the same. The comparison, illustrated below, of the skin of lip and palm will show you just why. The protective granular layer is absent from the lip covering—science has not stressed that before, although Cleopatra may have known it, since she was the first to prepare and use lip pomade.



The skin of the lip

Note lack of granular cells between tissues, and thin outer covering.

Roger & Gallet Lip Pomade assures this necessary protection under any exposure to light, heat, cold or wind. Pure, colorless, pleasant, it has been used in America since 1883. Physicians advise it for chapped or fevered lips. It is especially advised for children—women find it a splendid protection foundation for colored lipsticks. Your druggist supplies a convenient liberal stock for a quarter.

The skin of the palm

This shows deep granular layer between tissues, and thick outer skin.

ROGER & GALLET *Lip Pomade* 25c

If any crack, spot or lump on your lips persists, see your physician — don't attempt to treat it yourself.

ROGER & GALLET, Dept. H.1, 1071 Sixth Ave., N. Y. C.

Kindly send me free of charge trial package of Roger & Gallet Lip Pomade with comparison of lip and palm.

*Name*_____

*Address*_____

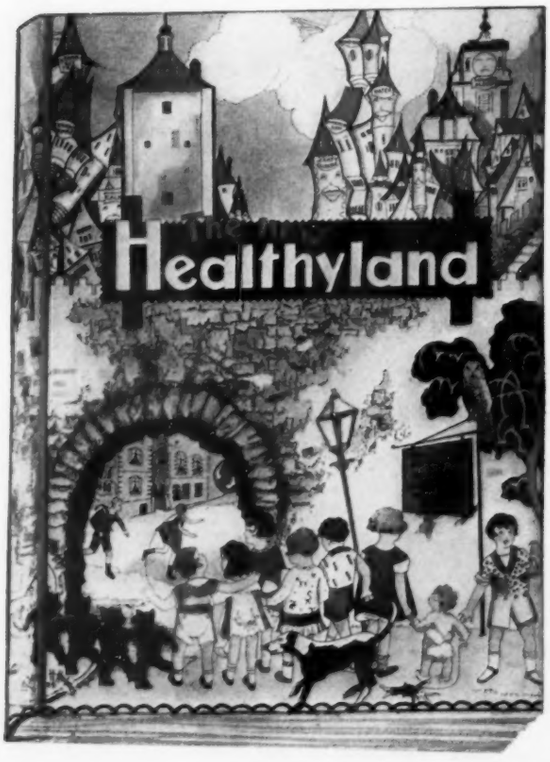
THE NEW HEALTHYLAND

A Wondrous Book of Health for the Children

The New *Healthyland,* a compilation of children's stories, plays, games and health activities from HYGEIA, is a successor to *Healthyland,* and its ideal is to make children enjoy the principles of healthy living. It raises the prosaic activities of eating and sleeping and getting out-of-doors into the glorious realms of the imagination where the fairies, the animals and other children from foreign lands participate in health games for the sake of rosy bodies and happy hearts. The New *Healthyland* is offered with a year's subscription to HYGEIA, at a most attractive price as will be noted below.

From the Foreword

Since the publishing of the original HEALTHYLAND in 1926, thousands of children have become ardent, loyal, Healthylanders. Some organizations have ordered Healthyland in thousand lots. One eager little Healthylander has worn out two copies and recently wrote for her third. The constant stream of orders and re-orders has reflected a definite need for another Healthyland.



Stories

Eighty-three pages in The New *Healthyland* are given to stories of gay adventures, fairy magic, talking animals, princes and princesses and far-away lands —all written to make the children love the ideal of healthy mental and physical living. Even parents will enjoy these naive tales of the Healthylanders.

Letters

There are eight letters about the health customs from the little people in remote parts of the earth, Italy, Holland, Japan, Australia. Beautiful borders in fancy colored ink depicting the countries from which they come illustrate the letters. When little Americans learn that even the foreign children are struggling healthward, their imaginations will kindle them to double effort.

Plays

Teachers, here is a gold mine of constructive entertainment for the children's health classes; here is a chance to give them action concerning health to keep them interested in their own little bodies. There are eight of these plays about kings and queens and courts, knights and ladies and glad out-of-door life. The children will love to produce them.

Games, Puzzles Beautiful Pictures

The bright fantastic cover of The New *Healthyland* is an achievement in elfine gayety, and every winsome page exudes the atmosphere of wholesome childishness. Scores of whimsical, innocent child designs illustrate the unusual stories, plays, rhymes and letters of health. Twenty-four pages, interspersed throughout the book are printed on paper of gay colors, green, blue, red, orange, yellow, brightly attractive to children. A total of 168 pages, 8½ by 11½ inches, comprise The New *Healthyland.*

SPECIAL OFFER

Hygeia—1 year with The New Healthyland

$4.00 If Cash is Sent With Order

$4.50 5-day Examination Privilege

If you are already a subscriber, you may take advantage of this offer by extending your present subscription one year. Use this coupon.

American Medical Association,
535 North Dearborn St., Chicago, Ill.

Enclosed find $4.00 for a year's subscription to HYGEIA with a copy of The New *Healthyland.*

Name .....

Address .....